

APPENDIX H

**SUPPORTING INFORMATION
FOR CULTURAL RESOURCES**

CULTURAL RESOURCES

Eglin AFB Historical Setting Summary

People are thought to have inhabited Florida for about 12,000 years. Archaeological evidence indicates that the earliest inhabitants were Paleoindian people who hunted now extinct Pleistocene animals, in addition to using small game and gathering wild plants and shellfish (Russo, 1990). As the climate gradually warmed, the resource base expanded and people developed new technologies and settlement patterns. They hunted animals such as deer, raccoon, and waterfowl. Fishing was a common activity along the coasts and rivers; shellfish were common food items. A wide range of plants was also collected. More specialized bone, stone, and shell tools were manufactured. Eventually pottery was introduced and trade networks developed. Several different kinds of cemeteries are known from this period (Russo, 1990).

Population growth was accompanied by the development of elaborate ceremonial complexes, mound burial, permanent settlements, and an increasing reliance on cultivated plants (Milanich, 1990). Baskets, weirs, and nets were intensively used to harvest shellfish and fish. Traps, throwing stones, and spears may have been used for hunting small mammals and deer (U.S. Air Force, 2000). A variety of ceramics were also used. Coastal shell middens occurred in a variety of shapes: circular, horseshoe-shaped, rectangular with cleared interior areas, and small linear shapes. Burial mounds often occurred in conjunction with the larger coastal shell middens. Later villages, hamlets, and camps clustered around mounds and cemeteries. Shellfish were collected, and fishing and hunting may have been supplemented by maize horticulture. Increasing ceremonialism is reflected in the presence of ceremonial complexes centered around large platform mounds containing burials. The major river valleys were densely occupied by intensive agriculturalists who were organized around the large ceremonial centers (U.S. Air Force, 2000).

Spanish explorers entering the region in the early 1500s encountered Maskoki-speaking groups called Seminoles by later English settlers. The name Seminole derived from the Maskoki *isti siminoli* meaning “free people.” In southern Georgia, English traders who encountered Maskoki-speaking groups living along the creeks referred to them as Creeks (Seminole, 2000). The Creek culture arrived in Florida with the Chiscas (Yuchis), joining the Chatot and Pensacola tribes. The Creeks and the Seminoles migrated into Choctawhatchee Bay by the 18th century (U.S. Air Force, 2000). Most evidence indicates that Spanish exploration focused on the Pensacola Bay area. The only permanent occupation in the region was a Spanish colony established in 1699 (U.S. Air Force, 2000), although Spanish fishermen may have lived on the shores of St. Andrew’s Bay. There is also some evidence that Smack Bayou was used during this time as a place to repair ships and boats.

After the Revolutionary War, Euroamericans moved south into the former Spanish and English lands, and conflicts arose between the native inhabitants and the settlers. In the Creek War of 1813 to 1814, some Creek groups in Alabama rose up against the settlers and the native groups that supported them. General Andrew Jackson brought in United States troops to quell the uprising and negotiated a treaty that took more than 2 million acres of land from the Native Americans (Seminole, 2000). Following the war, many Creeks migrated southward into Spanish

Florida with the Seminoles, where they resisted Jackson's continued attacks. Eventually, more than 3,000 natives were removed to Arkansas and Oklahoma by the United States government.

With the development of southern Florida during the 20th century, the remaining Seminoles became agricultural workers and worked in the tourist industry. The Seminole Tribe of Florida was established in 1957 in southern Florida (Seminole, 2000). American Indian groups within the Eglin AFB region include the Poarch Band of Creek and the Florida Tribe of the Eastern Creek (BIA, 1998). The Poarch Band of Creek, a federally recognized tribe, was part of the Creek Nation that avoided removal and remained in southern Alabama. More than 1,000 remain in the vicinity of Poarch, Alabama near Atmore (Poarch Creek Indians, 2000). The Florida Tribe of Eastern Creeks is an organization of Creek Indian descendants with members concentrated in Calhoun and Walton counties, Florida (FSU, 1995). The Eastern Creeks are not federally recognized.

Initial Euroamerican settlement following United States annexation of Florida territory was concentrated along the coast, rivers, and navigable creeks due to a lack of roads in the interior (U.S. Air Force, 2000). Timbering was an important source of income, and early settlers also raised stock, allowing them to free forage on tracts of less arable land. In 1830, Captain Leonard Destin, a shipmaster from Connecticut, started the first commercial fishing business in the area. By the early 1900s, there were 18 independent fishing camps built on stilts along the shoreline of the inlet (Eglin Guide 2004). After Florida became part of the U.S. in 1845, Americans gradually moved into western Florida. The coming of the railroad in 1883 opened up the forestlands of what is now the Eglin AFB reservation to the logging and turpentine industries (U.S. Air Force, 2002). Stock ranching also continued to be a viable economic option.

Jessie Rogers, a Louisiana cattleman, settled the Niceville area in the mid-1800s. A thriving mullet fishing industry developed in the area of the community of Boggy, named for a large peat bank on Juniper Creek. In 1910, Boggy became Niceville. Niceville was renamed Valparaiso in 1919. In 1925, after a nearby community was named New Valparaiso, old Valparaiso returned to the name of Niceville (Niceville, 2003).

What became Fort Walton Beach was settled by Euroamericans in 1897, when John Brooks came to what was known as Brooks Landing and Brooksville (Eglin Guide, 2004). The area's name was later changed to Camp Walton to honor the colonel of the Walton Guard, who had camped on Santa Rosa Sound. In 1937, the city incorporated with 90 people and was renamed Fort Walton after a fort established during the Seminole Wars. The name was changed to Fort Walton Beach in 1953 to encourage tourism (Eglin Guide, 2004).

In the early 20th century lands found unsuitable for agriculture were withdrawn from the public domain to determine their suitability for national forest purposes. President Theodore Roosevelt established the Choctawhatchee National Forest on November 27, 1908. The supervisory headquarters was established at DeFuniak Springs and moved to Pensacola in 1910. Congress transferred the Choctawhatchee National Forest from the Forest Service to the War Department for military purposes on June 27, 1940. The law provided that the land may be restored to national forest status by proclamation or order of the President when it was no longer needed for military purposes (USFS, 2004).

Camp Pinchot was built in 1910 as the original headquarters for US Forest Service personnel assigned to the newly created Choctawhatchee National Forest, one of seven original National Forests created by President Theodore Roosevelt in 1908. Transferred to the War Department in 1940, Camp Pinchot gained further significance for its role in the development of Eglin and in US preparation for W.W.II. It served as the home of the Air Armament Center Commander beginning in 1950 (U.S. Air Force, 2004b).

In 1931, the Army Air Corps Tactical School (Maxwell Field, Alabama) identified the sparsely populated forested areas surrounding Valparaiso, Florida, and the vast expanse of the adjacent Gulf of Mexico as a site for a bombing and gunnery range (U.S. Air Force, 2004a). James E. Plew, a local businessman, saw the potential of a military payroll to boost the depression-stricken economy in the local area. He leased to the City of Valparaiso 137 acres on which an airport was established in 1933, and in 1934, he offered the U.S. government a donation of 1,460 contiguous acres for the bombing and gunnery base. This became the headquarters for the Valparaiso Bombing and Gunnery Base activated on 14 June 1935 under the command of Captain Arnold H. Rich. In 1937, the base was re-designated Eglin Field in honor of Lieutenant Colonel Frederick I. Eglin who was killed that same year in an aircraft crash (U.S. Air Force, 2004a).

With the outbreak of war in Europe in 1939, General Henry H. "Hap" Arnold ordered the establishment of a proving ground for aircraft armament. Eglin was selected for the testing mission, and in 1940, the U.S. Forestry Service ceded to the War Department the Choctawhatchee National Forest, consisting of some 384,000 acres. In 1941, the Air Corps Proving Ground was activated, and Eglin became the site for gunnery training for Army Air Forces fighter pilots, as well as a major testing center for aircraft, equipment, and tactics. In March 1942, the base served as one of the sites for Lieutenant Colonel Jimmy Doolittle to prepare his B-25 crews for their raid against Tokyo (U.S. Air Force, 2004a).

In addition to testing all new aircraft and their serial modifications, the Proving Ground Command established at Eglin found the isolation and immensity of the ranges especially well suited for special tasks. For example, in 1944 personnel developed the tactics and techniques to destroy German missile installations being built to support V-1 buzz-bomb attacks on England. Eglin also became a pioneer in missile development in early 1946 when the First Experimental Guided Missiles Group was activated to develop the techniques for missile launching and handling; establish training programs; and monitor the development of a drone or pilotless aircraft capability to support the Atomic Energy Commission tests, Operation CROSSROADS, at Eniwetok. In 1947, the Guided Missiles Group received nationwide publicity by conducting a successful drone flight from Eglin to Washington, D.C., in a simulated bombing mission (U.S. Air Force, 2004a).

Officially designated Eglin Auxiliary Field No. 9, Hurlburt Field served as one of the small training fields built on the sprawling Eglin Air Force Range in the 1940s. Eglin commander General Grandison Gardiner named it for First Lieutenant Donald Wilson Hurlburt who was killed in an aircraft crash at the main base in 1943 (U.S. Air Force, 2004b).

In early 1950, the Air Force established the Air Research and Development Command (later Air Force Systems Command). The following year, the Air Research and Development Command established the Air Force Armament Center at Eglin bringing development and testing together

for the first time. The Air Force combined the Air Proving Ground Command and the Air Force Armament Center to form the Air Proving Ground Center in 1957. The Center built the highly-instrumented Eglin Gulf Test Range and for the next few years, served as a major missile test center for weapons such as the BOMARC, Matador, GAM-72 "Quail," and GAM-77 "Hound Dog" (U.S. Air Force, 2004a).

During the 1950s, the town of Cinco Bayou became a residential community supporting the increased activities at Eglin Air Force Base and the expanding commercial and tourist enterprises of the Fort Walton Beach area (Cinco Bayou, 2004).

After falling into disuse and disrepair following World War II, Hurlburt Field was reactivated in 1955 to receive the 17th Light Bombardment Wing from Japan. They trained at Hurlburt for three years before being succeeded by the 4751st Missile Wing of the Air Defense Command that tested surface-to-air missiles launched from Okaloosa Island between Santa Rosa Sound and the Gulf of Mexico (U.S. Air Force, 2004).

To address critical housing shortages after World War II, legislation encouraging the construction of family housing near or on military installations was enacted. In 1949, a bill was introduced to provide for construction of family housing by Senator Kenneth Wherry of Nebraska. The military was to ensure that installations where housing was built under the Wherry plan would be designated as permanent bases. Developers were to construct, own, and maintain the houses and give rent priority to military families. At the end of a 40-year period, each developer was to turn the project over to the Federal government. The Wherry bill did not require specific designs, so developers took designs for the needed housing units from existing plans in the civilian market and there are no specific Wherry-style homes. Problems with the Wherry houses ranged from their small size to shoddy construction techniques. A total of 264 Wherry projects with 83,742 units were built for three military departments (ACHP, 2003). Presently there are 625 units of Wherry housing at Eglin AFB, built from 1951 to 1958.

Military housing was further expanded in 1955 when Congress passed the *Capehart Housing Act*. Similar to Wherry, Capehart required private developers to build housing units for the military, but unlike Wherry, once the houses were completed they came under military control. Capehart houses were larger, reducing the complaints about the smaller Wherry homes. Privacy, preservation of the natural environment, and integration of the neighborhood into existing facilities were also key issues in Capehart housing. They also moved toward more single-family and duplex housing (ACHP, 2003). Presently there are 498 units of Capehart housing at Eglin AFB, built in 1958.

Because of the differences between the larger Capehart homes and the Wherry homes, many of the Wherry developments were at less than full occupancy and some projects defaulted. By the end of the 1950s, Congress mandated the acquisition of Wherry housing at all installations that were to receive Capehart units. The primary objective of acquiring the Wherry houses was for the military to bring these homes up to the standards of other assigned housing in size and design of living spaces. At that time, kitchen upgrades and additional bathrooms and utility rooms were authorized (ACHP, 2003). When the Capehart program ended in 1964, nearly 250,000 units of Wherry and Capehart had been built for the military.

The revival of the air commando legacy at Hurlburt Field began in 1961 when the Tactical Air Command (TAC) activated the 4400th Combat Crew Training Squadron (CCTS). Less than a year later it became the 4400th Combat Crew Training Group (CCTG), which provided the Air Force with a counterinsurgency and military assistance capability. In 1963, the group became the 1st Air Commando Wing (ACW). The air commandos trained South Vietnamese Air Force personnel and flew some of the earliest U.S. combat missions of the war (U.S. Air Force, 2004).

As the Southeast Asia conflict increased emphasis on conventional weapons, the responsibilities at Eglin AFB grew. In 1968, the Air Proving Ground Center was re-designated the Armament Development and Test Center to centralize responsibility for research, development, test and evaluation, and initial acquisition of non-nuclear munitions for the Air Force. In 1979, the Center was given division status. The Armament Division, re-designated Munitions Systems Division in 1989, placed into production the precision-guided munitions for the laser, television, and infrared-guided bombs; two anti-armor weapon systems; and an improved hard target weapon used in Operation DESERT STORM during the Persian Gulf War. The Division was also responsible for developing the Advanced Medium Range Air-to-Air Missile (AMRAAM), an Air Force-led joint project with the U.S. Navy (U.S. Air Force, 2004a). Eglin also served as the training site for the Son Tay Raiders in 1970, the group that attempted to rescue American POWs from a North Vietnamese prison camp. In 1975, the installation was one of four main U.S. Vietnamese Refugee Processing Centers, where base personnel housed and processed more than 10,000 Southeast Asian refugees at the Auxiliary Field Two "Tent City." Eglin again became an Air Force refugee resettlement center processing over 10,000 Cubans who fled to the United States in 1980 (U.S. Air Force, 2004a).

The Florida Ranger Camp was established at Eglin in 1951, by then Major Arthur "Bull" Simons, Commander of the Amphibious/Jungle Training Committee at Auxiliary Field Seven, which was the initial location of the Camp. The Florida Ranger Camp remained at Field Seven for 20 years until it was moved to Field Six in 1970. In 1974, the Florida Ranger Camp was officially renamed Camp James E. Rudder in honor of MG James E. Rudder, who commanded the 2d Ranger Battalion when it scaled the cliffs at Pointe Du Hoc, France, during the 1944 D-Day Normandy invasion (Global Security, 2002).

In 1990, the Munitions Systems Division was re-designated the Air Force Development Test Center (AFDTC). During the 1990s, the Center supported test and evaluation for the development of non-nuclear Air Force armament including next generation precision-guided weapons; operational training for armament systems; and test and evaluation of command, control, communications, computers, and intelligence (C4I) aerospace navigation and guidance systems. In 1998, the Air Force Development Test Center became the Air Force Materiel Command's center for air armament. As one of AFMC's product centers, AFDTC was renamed the Air Armament Center (AAC). The Center is responsible for development, acquisition, testing, deployment, and sustainment of all air-delivered weapons. The AAC applies advanced technology, engineering, and programming efficiencies across the entire product life cycle to provide superior combat capability. The Center plans, directs, and conducts test and evaluation of U.S. and allied air armament, navigation/guidance systems, and command and control (C 2) systems. It operates two Air Force installations, providing host support to Eglin and Kirtland AFBs, and supports the largest single base mobility commitment in the Air Force. AAC accomplishes its mission through four components: The Armament Product Directorate (Eglin),

46th Test Wing (Eglin), 96th Air Base Wing (Eglin), and 377th Air Base Wing (Kirtland) (U.S. Air Force, 2004a).

Today Hurlburt Field accommodates the 16th Special Operations Wing, Headquarters Air Force Special Operations Command (AFSOC), an Air Force major command, and a number of associate units (U.S. Air Force, 2004).

References:

- Advisory Council on Historic Preservation (ACHP), 2003. Capehart Wherry Era Military Housing. <http://www.achp.gov/army-capehartwherry.html>.
- BIA, 1998. Bureau of Indian Affairs (BIA). 1998. Indian Lands and BIA Office Sites, Eastern Area Office (South). Geographic Data Service Center. <http://www.gdsc.bia.gov/>.
- Cinco Bayou, 2004. Cinco Bayou History. www.cincobayou.com/history1.htm
- Eglin Guide, 2004. Eglin Air Force Base Guide. www.united-publishers.com/EglinGuide/communities.html.
- Florida State University (FSU). 1995. Atlas of Florida – Population. Indian Population 1990. Florida Resources and Environmental Analysis Center. <http://www.freac.fsu.edu/FloridaAtlas/Population>.
- Global Security, 2002. Camp James E. Rudder Florida Ranger Camp Eglin AFB, Auxiliary Field #6. www.globalsecurity.org/military/facility/camp-rudder.htm.
- Milanich, G. T., 1990. Northwest Florida. In Florida Historical Contexts. G.T. Milanich, Project Director. State of Florida Division of Historical Resources, Tallahassee, Florida.).
- Niceville, 2003. History of Niceville. Niceville Community Website. www.emeraldcoast.com/community/niceville/localinfo/history.asp.
- Poarch Creek Indians, 2000. Tribal History and Culture. History of the Poarch Creek Indians. <http://www.poarchcreekindians.org/>.
- Russo, M., 1990. The Archaic Period. In *Florida Historical Contexts*. G.T. Milanich, Project Director. State of Florida Division of Historical Resources, Tallahassee, Florida.)
- Seminole, 2000. Seminole Tribe of Florida. Brief Summary of Seminole History. <http://www.seminoletribe.com/history>.
- U.S. Air Force, 2000. *Environmental Baseline Study-Resource Appendices*. Appendix M. Cultural Resources; Appendix B. Land Use. www.eglin.af.mil.
- U.S. Air Force, 2000a. Eglin AFB, FL. Cultural Resources. ProAct. A Base-Level Pollution Prevention Resource. April.
- U.S. Air Force, 2004. 16th Special Operations Wing, Hurlburt Field, Florida. Commando Heritage & Park Guide. <http://www.hurlburt.af.mil/heritage/guide/-HF>.
- U.S. Air Force, 2004a. Eglin AFB, FL. *Eglin Air Force Base History*. www.eglin.af.mil/history.htm.
- U.S. Air Force, 2004b. Eglin AFB, FL. Environmental Management Virtual Tours. www.eglin.af.mil/em/virtualtours.
- U.S. Forest Service (USFS), 2004. What Is The Choctawhatchee? <http://www.southernregion.fs.fed.us/florida/about/index.shtml>.

Attachments:

In January 2005, Eglin Air Force Base (Eglin), Florida, commissioned the Air Force Center for Environmental Excellence (AFCEE) to complete a Case Study/Adaptive Reuse Alternatives Report (Report) for the Camp Pinchot Historic District (CPHD). Camp Pinchot, which consists of ten (10) contributing buildings and three (3) non-contributing buildings, was listed in the National Register of Historic Places (National Register) in 1998. The resulting 294-page Report, titled *Final Case Study/Adaptive Reuse Alternatives Report for Camp Pinchot Historic District, Eglin Air Force Base, Okaloosa County, Florida*, is provided in electronic format at the end of this Appendix H of the Environmental Impact Statement (EIS) on the accompanying compact disc that contains the EIS Resource Appendices.

(This page is intentionally blank.)

FINAL

**Case Study/Adaptive Reuse Alternatives Report for
Camp Pinchot Historic District
Eglin Air Force Base
Okaloosa County, Florida**



July 25, 2005

FINAL
Case Study/Adaptive Reuse Alternatives Report for
Camp Pinchot Historic District
Eglin Air Force Base
Okaloosa County, Florida

* * * * *

Prepared for:

96 CEG/CEVH
501 DeLeon Street
Building 238
Suite 101
Eglin Air Force Base, Florida 32542

* * * * *

Prepared by:

Hardlines Design Company
4608 Indianola Avenue
Columbus, Ohio 43214

* * * * *

July 25, 2005

Executive Summary

In January 2005, Eglin Air Force Base (Eglin), Florida, commissioned the Air Force Center for Environmental Excellence (AFCEE) to contract Hardlines Design Company (HDC) to complete a Case Study/Adaptive Reuse Alternatives Report (Report) for the Camp Pinchot Historic District (CPHD). Camp Pinchot, which consists of ten (10) contributing buildings and three (3) non-contributing buildings, was listed in the National Register of Historic Places (National Register) in 1998. The district also includes a significant archaeological site (8OK871) that was determined eligible for the National Register in 1999. The entire site and the prehistoric and historic components are significant and eligible for the National Register. The site underlies a significant portion of the CPHD. Eglin is considering demolition of all buildings in the district in order to support their multi-family demolition, construction, renovation, and lease of family housing under Eglin's Housing Privatization Plan. Significant ground disturbance will result from the proposed demolition and construction work.

HDC sent a three-person team to Eglin to complete the fieldwork from February 14th through February 18th of 2005. The team consisted of a Registered Architect, a Preservation Planner, and a Facility Planner. The team investigated the exterior and interior of each facility through two guided tours. They also interviewed various Eglin personnel located in numerous organizations, including Civil Engineering, Cultural Resources, Natural Resources, Real Estate, Security, Legal, Encroachment, Housing, and Services.

This report provides reasonable alternatives that weigh economic considerations, cost-effective use of public monies, compliance with Federal regulations, stewardship of historic properties, and support of the Eglin mission. Probable actions related to these buildings have the potential to result in an adverse effect to these properties and the district. Consequently, the preparation of this Case Study/Adaptive Reuse Alternatives Report, although not specifically mandated, supports Eglin's requirement under Section 110 of the National Historic Preservation Act (NHPA) of 1966 to "preserve and use" historic properties to the greatest extent feasible and to give 'special consideration' to properties of national significance.

The preferred privatization course of action is demolition of the structures and replacement with new housing units. This course of action is reasonable since it eliminates ongoing maintenance costs, replaces housing units that do not meet current standards with new units that do, and provides standardized housing for *all* military members stationed at Eglin.

However, the Camp Pinchot historic district is nationally significant as a rare remaining example of an intact complex associated with the earliest years of the U.S. Forest Service. Its demolition would cause public concern at the federal, state, and local levels. Demolition and new construction would also require the archaeological mitigation of the entire site, which is a significant expense that must be borne by either Eglin or the privatization developer.

The purpose of this report is to identify potential alternatives, determine if they could logically be undertaken, and present the pros and cons (the reasonability) of each alternative. The Air Force will use this information in determining the ultimate disposition of the CPHD.

Alternatives fall into four overall categories: use by the Air Force, integration into the housing privatization project, lease by another agency, and actual property transfer outside of Air Force control.

Table 1 below shows the alternatives considered for this report. The table is sorted first by reasonability and then by category. Each category is further sorted by long-term cost. Cost estimates were not provided for alternatives that were not found to be reasonable or for alternatives that would require funding by other agencies.

Table 1 Alternatives

Alternative	Estimated Initial Cost (\$)	Estimated Long-Term O&M Cost (\$)	Is It Reasonable?	Category
Partnership with federal/state agencies (Interpretive Center)	2,315,116	19,573,002	Yes	Air Force leasing
Non-profit organizations	No estimate	No estimate		
Mothballing	235,825	395,620	Yes	Air Force occupancy
Demolish with land converted to a park	1,202,544	9,284,203		
Base recreational facility	993,846	19,659,300		
Demolish / construct new GOQ and SOQs	3,392,556	18,015,616	Yes	Housing privatization
Renovate JNCOQs	1,678,388	19,425,110		
Renovate as GOQ, SOQ, & JNCOQs	1,924,229	19,425,110		
Use by Housing Developer as Offices	1,798,606	19,451,375		
Maintain as GOQ, SOQ, CGO, & JNCOQs	443,430	21,603,007		
Land swap and conservation easements	No estimate	No estimate	Yes	Non-Air Force
Transfer to U.S. Forest Service	No estimate	No estimate		
Base restaurant	No estimate	No estimate	No	Air Force occupancy
Eglin agency offices	No estimate	No estimate		
Temporary lodging facility (TLF)	No estimate	No estimate		

Table of Contents

Executive Summary	i
List of Figures	viii
List of Tables	ix
List of Acronyms	x
Chapter 1 Project Methodology	1
Project Methodology.....	3
Fieldwork	3
Criteria Development.....	4
Cost Estimates.....	4
Chapter 2 Background Information	5
Introduction to Eglin Air Force Base.....	7
General Information about Eglin	7
Historical Development of Eglin	8
The Housing Privatization Initiative	9
Legal Precedents for Historic Preservation	13
Historical Background for Camp Pinchot Historic District.....	16
Establishment of the National Forest and Camp Pinchot	16
The Forest Service and Camp Pinchot.....	16
Eglin Air Force Base and Camp Pinchot	17
Historical Significance of Camp Pinchot.....	18
Camp Pinchot and the National Register of Historic Places.....	20
Land Value of Camp Pinchot.....	22
Original Transfer of the Property from the Forest Service to the War Department	22
Eglin Air Force Base and Hurlburt Field Housing Program	22
Current Housing Available at Eglin and Hurlburt	22
Current Housing Privatization Project	23
Military Family Housing Choices.....	24
Available Housing Options.....	24
Military Housing Standards	24
Overall Standards.....	24
Funding Issues	25
Demolition Funds.....	25
Military Construction (MILCON)	26
Housing Operations and Maintenance (O&M).....	26
Historic Building Funding Sources.....	27

Chapter 3 Adaptive Reuse Alternatives.....	29
Criteria to Determine Reasonability	31
Air Force Occupancy Options	32
Base Recreational Facility	32
Mothballing.....	35
Demolition of Buildings, with Land Converted to a Park	37
Base Restaurant.....	39
Eglin Agency Offices.....	41
Temporary Lodging Facilities (TLFs)	43
Housing Privatization Options.....	45
Use by Housing Developer	45
Maintain as Existing GOQ, SOQ, and JNCOQ	47
Renovate into GOQ, SOQs, and JNCOQ	49
Renovate into JNCOQs.....	51
Demolition of Buildings and Construction of New GOQ/SOQs.....	52
Housing Development Costs and Payback	54
Air Force Leasing Options.....	56
Partnership with State and Federal Agencies for an Interpretive Center.....	56
Non-Profit Organizations.....	58
Non-Air Force Options	59
Land Swaps and Conservation Easements.....	60
Transfer to the U.S. Forest Service.....	62
Chapter 4 Camp Pinchot Building Assessments.....	65
Building 1551 – Garage.....	67
Building History.....	67
Historical and Architectural Significance of Building.....	68
Existing Conditions.....	68
Previous Operation and Maintenance Costs	68
Building Occupants and Plans	68
Assessment of Use Capacity	69
Reasonable Alternatives.....	69
Cost Estimates.....	69
Floor Plan.....	72
Building 1552 – Maintenance Shed.....	73
Building History.....	73
Historical and Architectural Significance of Building.....	74
Existing Conditions.....	74
Previous Operation and Maintenance Costs	75
Building Occupants and Plans	75
Assessment of Use Capacity	75
Reasonable Alternatives.....	75
Cost Estimates.....	75
Floor Plan.....	78

Building 1553 – Maintenance Supervisor’s Office	79
Building History.....	79
Historical and Architectural Significance of Building.....	80
Existing Conditions.....	80
Previous Operation and Maintenance Costs	81
Building Occupants and Plans	81
Assessment of Use Capacity	81
Reasonable Alternatives.....	81
Cost Estimates.....	81
Floor Plan.....	84
Building 1555 – Garage.....	85
Building History.....	85
Historical and Architectural Significance of Building.....	86
Existing Conditions.....	86
Previous Operation and Maintenance Costs	86
Building Occupants and Plans	86
Assessment of Use Capacity	87
Reasonable Alternatives.....	87
Cost Estimates.....	87
Floor Plan.....	90
Building 1556 – Officer’s House.....	91
Building History.....	91
Historical and Architectural Significance of Building 1556.....	92
Existing Conditions.....	92
Previous Operation and Maintenance Costs	93
Building Occupants and Plans	94
Assessment of Use Capacity	94
Reasonable Alternatives.....	94
Cost Estimates.....	94
Floor Plan.....	98
Building 1557 – Cottage	99
Building History.....	99
Historical and Architectural Significance of Building.....	100
Existing Conditions.....	100
Previous Operation and Maintenance Costs	101
Building Occupants and Plans	101
Assessment of Use Capacity	102
Reasonable Alternatives.....	102
Cost Estimates.....	102
Floor Plan.....	106
Building 1558 – Cottage.....	107
Building History.....	107
Historical and Architectural Significance of Building.....	108
Existing Conditions.....	108
Previous Operation and Maintenance Costs	109
Building Occupants and Plans	110

Assessment of Use Capacity	110
Reasonable Alternatives.....	110
Cost Estimates.....	110
Floor Plan.....	114
Building History.....	115
Historical and Architectural Significance of Building 1559.....	116
Existing Conditions.....	116
Previous Operation and Maintenance Costs	118
Building Occupants and Plans	118
Assessment of Use Capacity	118
Reasonable Alternatives.....	118
Cost Estimates.....	119
Floor Plan.....	123
Building 1561 – Boathouse.....	125
Building History.....	125
Historical and Architectural Significance of Building.....	126
Existing Conditions.....	126
Previous Operation and Maintenance Costs	127
Building Occupants and Plans	127
Assessment of Use Capacity	127
Reasonable Alternatives.....	127
Cost Estimates.....	127
Floor Plan.....	129
Building 1562 – Garage.....	131
Building History.....	131
Historical and Architectural Significance of Building.....	132
Existing Conditions.....	132
Previous Operation and Maintenance Costs	132
Building Occupants and Plans	132
Assessment of Use Capacity	133
Reasonable Alternatives.....	133
Cost Estimates.....	133
Floor Plan.....	136
Non-Contributing Buildings and Structures – Structure 1550, Building 1564, and Building 1565.....	137
History of the Non-Contributing Structures	137
Historical and Architectural Significance of the Non-Contributing Buildings and Structures	138
Existing Conditions.....	138
Previous Operation and Maintenance Costs	138
Building Occupants and Plans	138
Assessment of Use Capacity	139
Reasonable Alternatives.....	139
Cost Estimates.....	139
Floor Plan.....	146

Chapter 5 Conclusions.....	149
Conclusions.....	151
Chapter 6 Bibliography.....	155
 Appendix A: Detailed Cost Estimates for Each Option	
Appendix B: Long-Term O&M Costs	
Appendix C: Public Law 437	
Appendix D: Standards for Housing Sizes	
Appendix E: Secretary of the Interior’s Standards for Rehabilitation	

List of Figures

Figure 1	Location of Eglin Air Force Base, Florida	10
Figure 2	Location of Camp Pinchot within Eglin Air Force Base map	11
Figure 3	Camp Pinchot site plan.....	12
Figure 4	Looking west at Building 1551.	67
Figure 5	Looking west at Building 1552.	73
Figure 6	Structural framing.....	74
Figure 7	Hayloft.	74
Figure 8	Looking west at Building 1553.	79
Figure 9	Interior of Building 1553.....	80
Figure 10	Looking north toward Building 1555.....	85
Figure 11	Looking southwest at Building 1556.....	91
Figure 12	View looking into living room from sunroom.	93
Figure 13	Remodeled kitchen.	93
Figure 14	Looking south at Building 1557.....	99
Figure 15	Windows dating to original construction period in sunroom.	101
Figure 16	Kitchen, view from living room.	101
Figure 17	Looking south toward Building 1558.....	107
Figure 18	Living room.	109
Figure 19	Kitchen, view from living room.	109
Figure 20	Termite damage at southwest corner of house.	109
Figure 21	Close-up of termite damage.....	109
Figure 22	Looking south at Building 1559.....	115
Figure 23	Living room, view from dining room.....	117
Figure 24	Looking toward the sunroom bar.	117
Figure 25	Remodeled kitchen.	117
Figure 26	Former exterior windows now located in sunroom.....	117
Figure 27	Looking east toward boathouse.	125
Figure 28	Damaged siding.	126
Figure 29	Boardwalk to boathouse.	126
Figure 30	Looking west toward Building 1562.....	131
Figure 31	Looking north at Building 1564.	137

List of Tables

Table 1	Alternatives.....	ii
Table 2	Contributing buildings in the Camp Pinchot Historic District	21
Table 3	Non-contributing buildings in the Camp Pinchot Historic District	21
Table 4	Work required for base recreational facilities.....	34
Table 5	Work required for demolition, with land converted to park	38
Table 6	Work required for Eglin agency offices	41
Table 7	Work required for TLFs.....	44
Table 8	Work required for use by housing developer.....	46
Table 9	Work required to maintain as existing GOQ, SOQ, and JNCOQ.....	48
Table 10	Work required to renovate into GOQ, SOQs, and JNCOQ	49
Table 11	Work required to renovate into JNCOQs	51
Table 12	Work required to demolish existing buildings and construct new GOQ/SOQs	53
Table 13	Reasonability of renovating Building 1556 to meet SOQ requirements	54
Table 14	Cost comparison, including archaeological work.....	55
Table 15	Cost comparison, excluding archaeological work	55
Table 16	Work required for a partnership with state and federal agencies	56
Table 17	O&M expenditures for Building 1551	68
Table 18	O&M expenditures for Building 1552.....	75
Table 19	O&M expenditures for Building 1553.....	81
Table 20	O&M expenditures for Building 1555.....	86
Table 21	O&M expenditures for Building 1556.....	94
Table 22	O&M expenditures for Building 1557.....	101
Table 23	O&M expenditures for Building 1558.....	110
Table 24	O&M expenditures for Building 1559.....	118
Table 25	Summary of alternatives sorted by reasonability and long-term cost.....	153

List of Acronyms

46 TW	46 th Test Wing
46 TW/CAX	46 th Test Wing/Encroachment Committee
96 CEG	96 th Civil Engineer Group
96 CEG/CEVH	96 th Civil Engineer Group/Cultural Resources Branch
96 CEG/CEV	96 th Civil Engineer Group/Environmental Management Division
96 CEG/CEHP	96 th Civil Engineer Group/Housing Privatization
96 SVS	96 th Services
AAC	Air Armament Center
ACHP	Advisory Council on Historic Preservation
AF	Air Force
AFCEE	Air Force Center for Environmental Excellence
AFI	Air Force Instruction
AFMC	Air Force Materiel Command
AFPD	Air Force Policy Directive
AFSOC	Air Force Special Operations Command
AT/FP	Anti-Terrorism / Force Protection
BAH	Basic Allowance for Housing
CA	Conditions Assessment
CAR	Case Alternatives Report
CCC	Civilian Conservation Corps
CE	Civil Engineer
CGO	Company Grade Officer
CNF	Choctawhatchee National Forest
CRMP	Cultural Resources Management Plan
DoD	Department of Defense
EAFB	Eglin Air Force Base
Eglin	Eglin Air Force Base
FH	Family Housing
FL	Florida
FTHP	Florida Trust for Historic Preservation
GSA	General Services Administration
GO	General Officer
GOQ	General Officer Quarters
HABS/HAER	Historic American Building Survey / Historic American Engineering Record
HCP	Housing Community Profile

HDC	Hardlines Design Company
HPP	Historic Preservation Plan
Hurlburt	Hurlburt Field
IBC	International Building Code
IMC	International Maritime Code
JNCOQ	Junior Non-Commissioned Officer Quarters
MFH	Military Family Housing
MILCON	Military Construction
MOA	Memorandum of Agreement
NRHP	National Register of Historic Places
NSA	Naval Support Activity
NTHP	National Trust for Historic Preservation
NYA	National Youth Administration
O&M	Operation and Maintenance
PA	Programmatic Agreement
PTA	Prentice Thomas and Associates, Inc.
RFP	Request for Proposal
SHPO	State Historic Preservation Officer
SNCO	Senior Non-Commissioned Officer
SO	Senior Officer
SOQ	Senior Officer Quarters
USAF	United States Air Force
USFS	United States Forest Service
USGS	United States Geological Survey
WPA	Works Progress Administration
WWI	World War I
WWII	World War II
YTR	Years to return (on an investment)

Chapter 1

Project Methodology

Project Methodology

The purpose of this report is to identify potential alternatives, determine if they could logically be undertaken, and present the pros and cons (the reasonability) of each alternative. The Air Force will use this information in determining the ultimate disposition of the Camp Pinchot Historic District (CPHD). The methodology used to produce this report is described below.

Fieldwork

In order to accomplish the report objective, HDC sent a three-person team to Eglin Air Force Base (Eglin) from 14 February through 18 February of 2005. The team included a Registered Architect, a Preservation Planner, and a Facilities Planner. At the start of fieldwork, the HDC team met with representatives from Eglin, Hurlburt Field (Hurlburt), and the Air Force Center for Environmental Excellence (AFCEE) to discuss the project, goals, and schedules. At this time, HDC was also able to obtain a binder of background information that had been requested by HDC prior to fieldwork. The requested items included, but were not limited to:

- Eglin Housing Privatization Plan
- Camp Pinchot National Register Nomination form
- Historic American Building Survey (HABS) of Camp Pinchot
- Camp Pinchot floor plans
- Construction estimates for Camp Pinchot
- Work orders for the past three-four years for Camp Pinchot
- Internal reports concerning Camp Pinchot
- Air Force housing standards
- Mission statements and demographic information about Eglin

During the course of fieldwork, HDC and Eglin representatives surveyed the ten contributing and three non-contributing buildings at Camp Pinchot. The team was able to study both the exterior and the interior of the facilities. The team took digital photographs of key features and overall characteristics of the site. While at Camp Pinchot, the team was able to speak with a few of the residents and the maintenance personnel.

The remaining fieldwork time included interviews and discussions with various representatives of Eglin. These representatives covered the wide range of Eglin departments and divisions, which included Civil Engineering, Encroachment, Housing, Maintenance, Security, and Services. HDC typed the notes from each interview and provided them in electronic format to each interviewee for review and comment.

At the conclusion of fieldwork, HDC held a closeout meeting with the representatives from Eglin, Hurlburt, AFCEE, Air Force Materiel Command (AFMC), and Air Force Special Operations Command (AFSOC). The closeout meeting summarized the activities that were

completed during the week and laid the groundwork for the work that was to be completed in the upcoming weeks.

After fieldwork was concluded, HDC continued to conduct interviews with Eglin and other Air Force personnel. The team also completed interviews with other interested parties, including:

- United States Forest Service (USFS)
- Advisory Council on Historic Preservation (ACHP)
- National Trust for Historic Preservation (NTHP)
- Florida Trust for Historic Preservation (FTHP)
- Florida State Historic Preservation Office (SHPO)

Criteria Development

HDC took the base of knowledge gleaned from interviews and research to develop various alternatives for Camp Pinchot. Based on our discussions and research, HDC and Eglin developed a list of criteria that the team could use to judge each alternative. (These criteria are described in detail in "Criteria to Determine Reasonability" on page 31.) Based upon these criteria, each alternative was deemed reasonable or not reasonable. This report presents the results of the background research, the interviews, and the criteria as applied to the alternatives.

Cost Estimates

HDC also developed estimated costs to implement the alternatives that were judged to be reasonable. For alternatives where the facilities remain as housing or other lodging, the costs and scopes were based on rehabilitation, which is defined here as a process that preserves the distinctive character of a historic building and its site, while allowing for reasonable change to meet new needs. For alternatives where facilities are used for non-lodging purposes, the costs and scopes were based on adaptive reuse, defined as a process that places a building in a new use that requires minimal change to the defining characteristics of the building and its site and environment, taking into consideration economic and technical feasibility.

Chapter 2

Background Information

Introduction to Eglin Air Force Base

General Information about Eglin

Eglin Air Force Base (Eglin) is located in Florida's panhandle and covers 724 square miles over three counties (Santa Rosa, Okaloosa, and Walton). Eglin also has a water test range spanning 98,000 square miles. Eglin is the largest Air Force Base in the Department of Defense (DoD), housing 62 organizations that include but are not limited to the Air Armament Center, 46th Test Wing, 96th Air Base Wing, 33rd Fighter Wing, and Naval Explosive Ordnance Disposal School.

Approximately 10,000 military personnel and 10,000 civilians are directly employed by Eglin. Nearly 15,000 military family members and 38,000 military retirees are associated with Eglin. The base estimates that they have a \$1.4 billion impact on the local community and that their activities and personnel indirectly create 12,900 jobs in the community, at an approximate dollar value of \$351 million.

Although Eglin Air Force Base is an Air Force Materiel Command (AFMC) installation, other major commands also maintain organizations at Eglin. The host organization is the Air Armament Center (AAC). The AAC mission, the major mission of Eglin, is to develop, test, acquire, and sustain integrated air armament and provide the agile combat support needed to defend the United States and its interests.

The associate organizations and tenants are the identity of Eglin. The base exists to support their missions and those of their airmen. Major organizations currently at Eglin include:

- The 96th Air Base Wing, which provides major civil engineering, personnel, logistics, communications, computer, security and all other host services to AAC and associate units. In addition to its normal host base support function, the Air Base Wing also runs one of the largest mobility commitments in the Air Force.
- The 46th Test Wing, which plans, conducts, analyzes and reports on flight/ground developmental test with uniquely modified aircraft and facilities. It also provides national leaders with essential performance information on weapons, aircraft survivability, and command and control systems. The wing supports all DoD components and numerous allied nations during evaluations and exercises, as well as acting as the manager or steward of the largest test and training range in the free world.
- The 53rd Wing, whose mission is to build the world's most respected air and space force through innovation, testing, evaluation, implementation, and sustainment of weapons and tactics.
- The 33rd Fighter Wing, which maintains the world's best rapidly deployable air control and air superiority forces for theater Commanders-In-Chief (CINCs).
- The 919th Special Operations Wing, which consists of quiet professionals providing specialized combat skills for wartime requirements. It is a subordinate organization of unified

special operations command that conducts special operations worldwide in response to National Command Authority taskings. The wing directs training and employment of personnel in MC-130E and MC-130P aircraft and is responsible for over 1300 assigned personnel in fourteen different units.

- The Naval School Explosive Ordnance Disposal (EOD), which trains U.S. Joint Service and International officer and enlisted personnel in the best methods and procedures for the detection, identification, render safe, recovery, evaluation, and disposal of explosive ordnance employed by the United States and other nations.

Historical Development of Eglin

In 1931, the Army Air Corps Tactical School (Maxwell Field, Alabama) was looking for a site for a bombing and gunnery range. Local businessman James E. Plew donated 137 acres to an auxiliary field and an additional 1,460 acres for a bombing and gunnery range. In June 1935, the area became known as the Valparaiso Bombing and Gunnery Base, and in January 1937, the base was renamed "Eglin Field," after Lieutenant Colonel Frederick I. Eglin of Maxwell Field, who had died earlier that year in an air crash.

After the outbreak of World War II in Europe and President Roosevelt's call for an expansion of the Army Air Corps, Eglin acquired 384,000 acres of the Choctawhatchee National Forest adjacent to Eglin Field. During World War II, the Air Corps Proving Ground was established and played a primary role in the testing of new weapons and tactics. In March 1942, the base served as one of the sites for Lieutenant Colonel Jimmy Doolittle to prepare his B-25 crews for their raid against Tokyo.

The Air Force established the Air Research and Development Command in early 1950. The following year, the Air Research and Development Command established the Air Force Armament Center at Eglin, which brought development and testing together. The Air Armament Center and the Air Proving Ground Command were combined to form the Air Proving Ground Center, which was subsequently reorganized to establish the Air Force Operational Test Center. The center was charged with conducting operational suitability testing. During the 1950s, Eglin was involved in the suitability of several missiles, including the Atlas and Titan.

Advanced technological weapons systems and tactics were tested at Eglin in the 1960s and 1970s. These systems included cruise missiles and laser-guided smart bombs, among others. During the Vietnam era, Eglin became home to the 33rd Fighter Wing. Eglin also served as the training site for the Son Tay Raiders in 1970, the group that made the daring attempt to rescue American POWs from a North Vietnamese prison camp. In 1975, the installation served as one of four main U.S. Vietnamese Refugee Processing Centers, where base personnel housed and processed more than 10,000 Southeast Asian refugees at the Auxiliary Field Two "Tent City."

Eglin has also played an important role in recent military events. Eglin units were involved in the aborted Iranian hostage rescue attempt in 1980, the Panamanian campaign in 1989, as well as Desert Shield in 1990 and Desert Storm in 1991, Restore Hope in Somalia in 1992, Uphold

Democracy in Haiti in 1994, the Bosnia effort in 1996, and currently, Operation Infinite Justice in Afghanistan and Operation Iraqi Freedom.¹

The Housing Privatization Initiative

The goal of the housing privatization initiative is to provide military service members and their families access to safe, secure, quality, affordable, well-maintained housing in a military community where they choose to live. The current shortage of such housing led to the enactment of the Military Housing Privatization Initiative (MHPI) in the 1996 National Defense Authorization Act.

The intent of the MHPI is to "drastically reduce the time to provide military members with quality, affordable housing and replace the Department of Defense's (DoD) aging inventory of housing units."² Traditional Military Construction (MILCON) funds are unavailable to meet this goal in a timely manner; government officials have determined that the best solution is to leverage available resources through such privatization.

Because of the close proximity of Eglin and Hurlburt Field, the two installations have teamed together to implement a joint housing privatization plan. At present, each installation has its own housing office, but under privatization, a single developer will "finance, plan, design and construct improvements, as well as own, operate and maintain the rental housing development and associated utility infrastructure systems for 50 years."³ Although CPHD is part of this joint housing privatization project, only Eglin is involved in determining its disposition.

The housing privatization initiative will provide housing at eleven parcels (approximately 1,700 acres) spread out at both Eglin and Hurlburt. Under the current plan, five General Officer Quarters (GOQs) are to be constructed, one of which is located on the CPHD parcel. Twenty-two Senior Officer Quarters (SOQs) are proposed, with two located on the CPHD parcel. It is proposed that ten of the SOQ units be constructed on the parcel located adjacent to the CPHD.

¹ Prentice Thomas & Associates, Inc., *Final Multiple Cultural Resources Investigations*, 43.

² Ibid.

³ Eglin/Hurlburt Housing Privatization Website, http://www.eglin.af.mil/Housing_Privatization/index.shtml

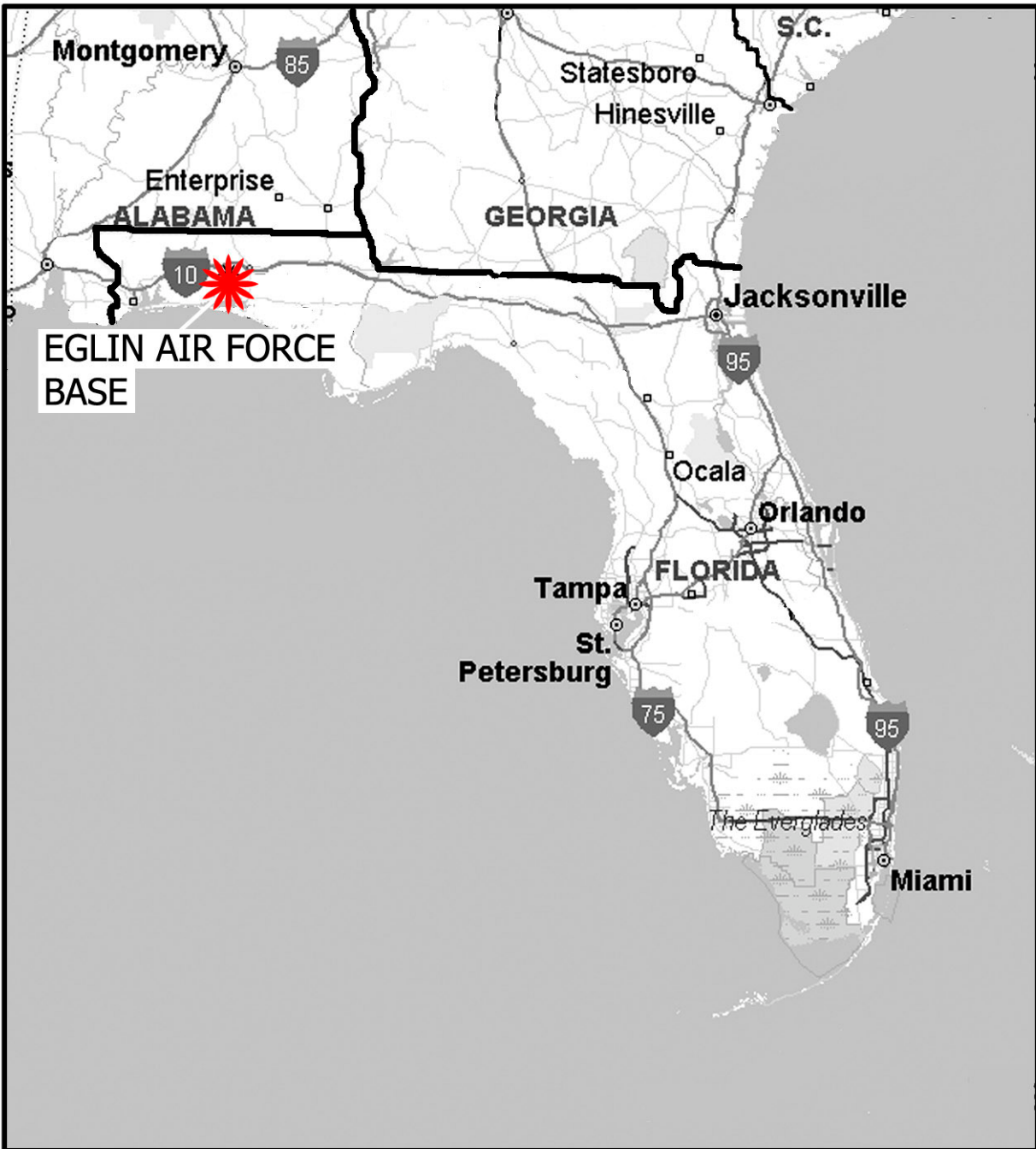


Figure 1 Location of Eglin Air Force Base, Florida

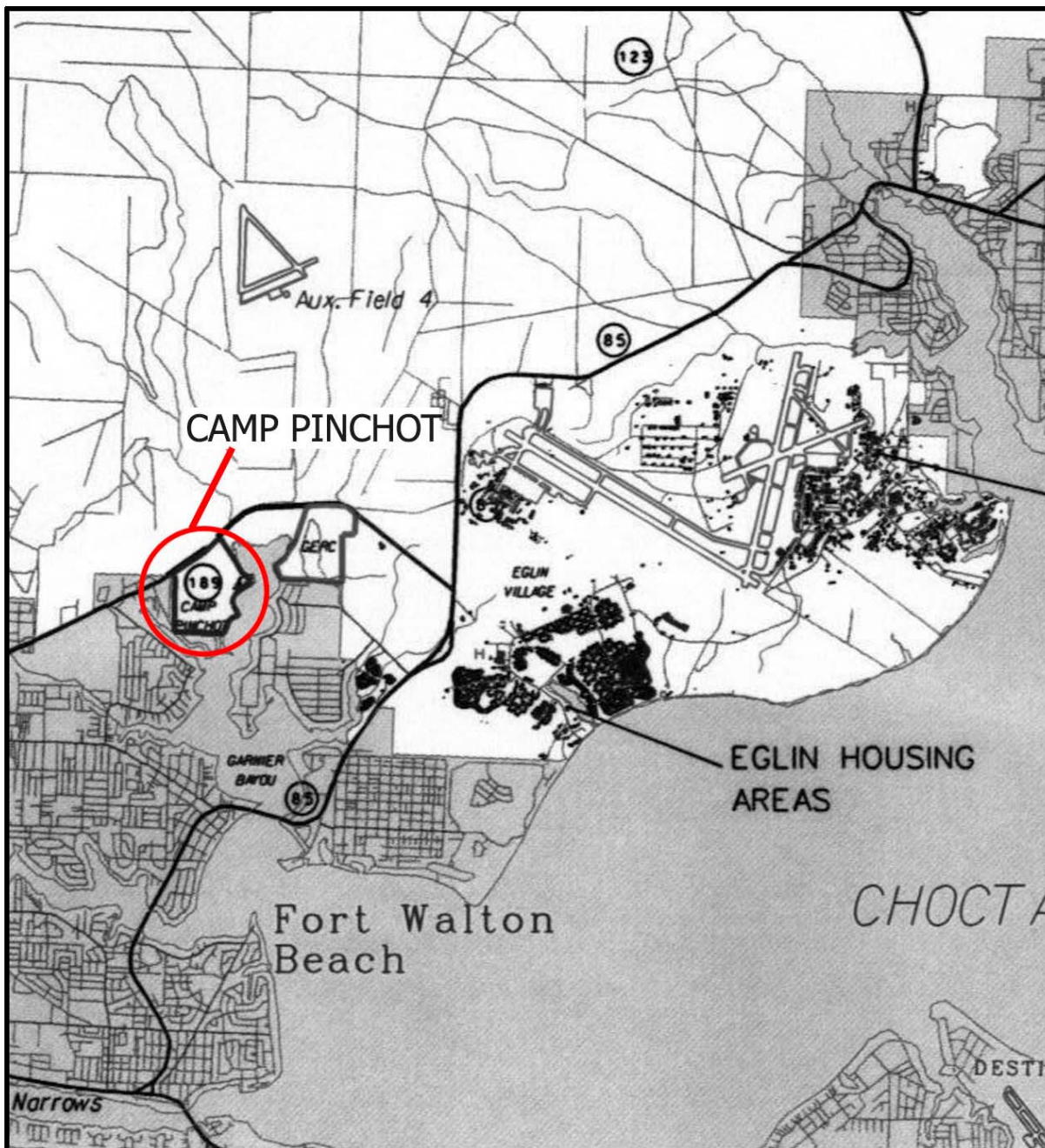


Figure 2 Location of Camp Pinchot within Eglin Air Force Base map

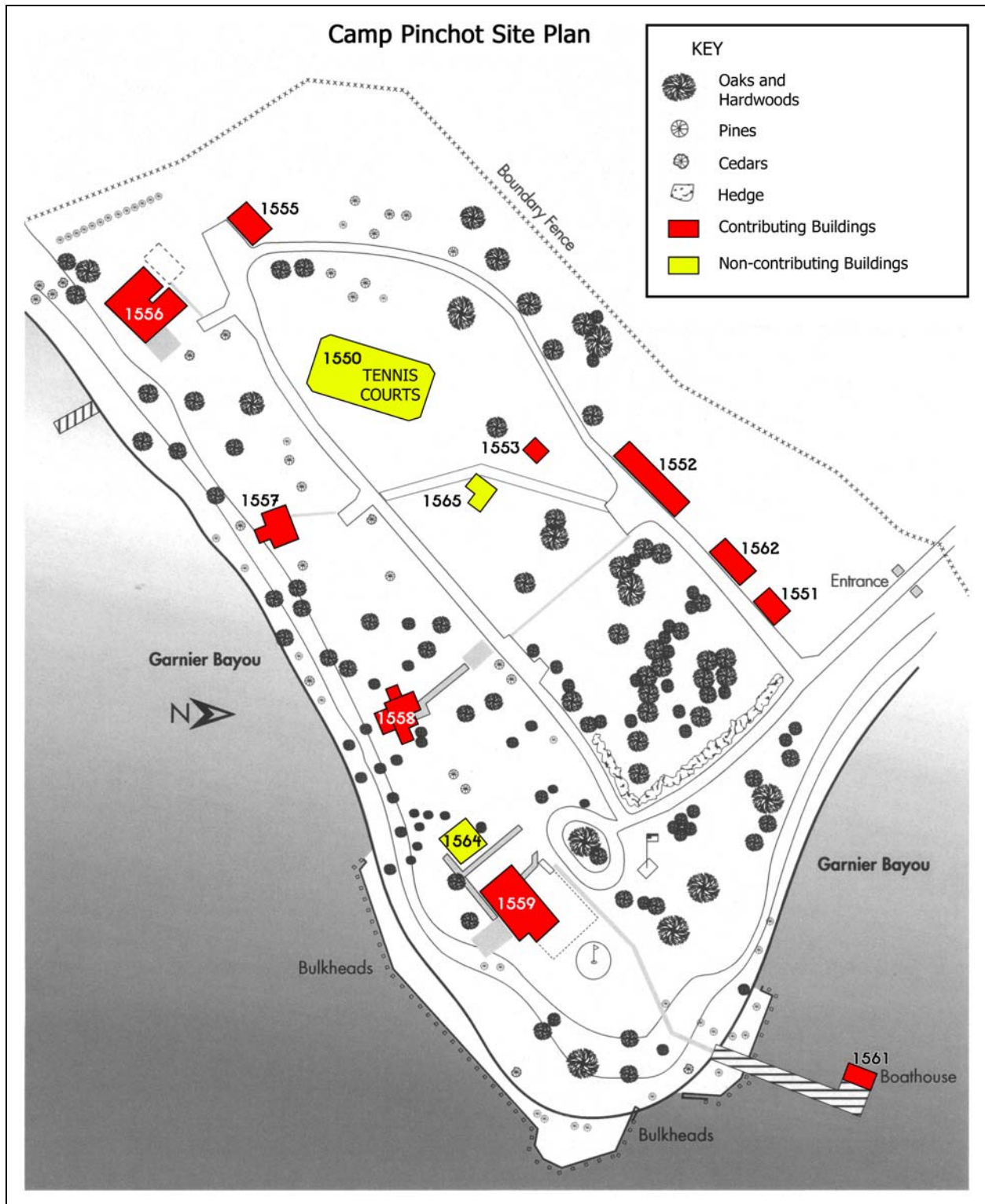


Figure 3 Camp Pinchot site plan.
 (Adapted from New South Associates, *Draft Historic American Building Survey*, 145.)

Legal Precedents for Historic Preservation

The preservation of historic buildings and resources has its origins in a battery of federal statutes that seek to preserve and protect properties of archeological and historical significance. The discussion that follows makes no attempt to detail the history of federal historic preservation legislation, but rather focuses on those regulations having the most direct bearing on the Camp Pinchot Historic District at Eglin.

Cultural resource inventories on federal lands are required specifically under the National Historic Preservation Act (NHPA) of 1966 and as amended in 1980 and 1991. NHPA is perhaps the single most significant piece of legislation of its kind. This act created the National Register of Historic Places in its modern form and, in Section 106, mandated that agencies such as Eglin Air Force Base “shall prior to the approval of the expenditure of any federal funds on the undertaking ...take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register.”

The purpose of Section 106 of the NHPA is to protect historic properties from unnecessary harm caused by federal actions. Section 106 requires federal agencies to consider the effects of their actions/undertakings on historic properties and to seek comments from an independent reviewing agency, the ACHP. Section 106 covers properties that are already listed in the NRHP, properties that are formally determined eligible for listing, and properties that are not formally determined eligible but meet specified eligibility criteria.

The intent of Section 110 of the NHPA is to ensure that historic preservation is fully integrated into the ongoing programs and missions of federal agencies, such as Eglin. Section 110 directs agencies to assume responsibility for preservation, which includes utilizing available historic properties when possible and taking the necessary steps to preserve and maintain them. Section 110 of the NHPA requires federal agencies to consider three major mandates:

1. Use available historic buildings or structures. Section 110(a)(1) requires that to the maximum extent feasible, NRHP-eligible buildings or structures should be used rather than simply demolished. Eglin is required to consider using these buildings before they acquire, construct, or lease other buildings/structures. This category includes keeping the original functions for which the buildings or structures were designed (e.g., having dormitories in dormitory buildings), rehabilitation (e.g., updating existing mechanical systems), or adaptive reuse of buildings whose original designed purpose is no longer valid (e.g., converting excess warehouse space into offices). Although the proposed use for the Camp Pinchot buildings is not direct government use, it does assist Eglin in carrying out its responsibilities to military members.
2. Locate, inventory, and nominate eligible resources to the NRHP. Section 110(a)(2) requires establishing a preservation program to locate and inventory all resources that are eligible for the NRHP. This program can take one of two forms: a project-by-project basis or an installation-wide survey. The program shall also ensure that such

properties under the jurisdiction or control of the agency that are listed in the NRHP, or may be eligible for listing, are managed and maintained in a way that considers the preservation of their historic, archaeological, architectural, and cultural values in compliance with section 106 of this Act and gives special consideration to the preservation of such values in the case of properties designated as having national significance.

3. Avoid inadvertent effects on NRHP-eligible resources. Section 110(a)(2) requires Eglin to exercise caution to ensure that no NRHP resource is "inadvertently transferred, sold, demolished, substantially altered, or allowed to deteriorate significantly." This section charges Eglin with protecting its NRHP cultural resources by avoiding adverse impacts to these resources. Significant deterioration may result from deferred building maintenance and natural erosion of archaeological sites. In other words, *inaction* by Eglin to adequately maintain its NRHP-eligible resources is also an undertaking and subject to the Section 106 procedure. In the event that resources are adversely affected, Section 110 requires that "timely steps be taken to make or have made appropriate records" of the affected resources for deposit into the Library of Congress. Usually these records are in the form of Historic American Building Survey /Historic American Engineering Record (HABS/HAER) documents.

The intent of the National Environmental Policy Act (NEPA) of 1969 is to create an atmosphere of environmental concern. Title I states that "... it is the continuing responsibility of the Federal Government to use all practicable means ... to improve and coordinate Federal plans, functions, programs, and resources to the end that the nation may ... preserve important historic, cultural, and natural aspects of our national heritage ..."

Executive Order 11593, Protection and Enhancement of the Cultural Environment, signed May 13, 1971, specifically invokes the NHPA but also refers to the NEPA and earlier statutes in directing that federal land-holding agencies inventory their lands for cultural properties and make appropriate nominations to the NRHP. The Order directs federal agencies such as Eglin to provide leadership in preserving, inventorying, and protecting cultural resources.

The Archaeological and Historic Preservation Act (AHPA) of 1974 provides for the preservation of historical and archaeological data that might otherwise be irreparably lost or destroyed as a result of any federal construction project or federally funded, licensed activity or program. The act established procedural guidelines and set monetary limits for federal agencies involved in undertakings that threaten cultural resources. Furthermore, AHPA stipulates that if archaeological resources are found, the agency must provide for their recovery or salvage. The law applies to any agency whenever it receives information that a direct or federally assisted activity could cause irreparable harm to prehistoric, historic, or archaeological resources. The act directs that up to one percent of the total funding appropriated for an undertaking may be expended on mitigation of adverse impacts to known NRHP sites. No funding limit exists under AHPA for emergency discovery situations.

The Public Buildings Cooperative Use Act of 1976 (PL 94-541) encourages the adaptive reuse of historic buildings as administrative facilities for federal agencies or activities.

Executive Order 13287, Preserve America, established that it is the policy of the federal government to provide leadership in preserving America's heritage by actively advancing the protection, enhancement, and contemporary use of the historic properties owned by the federal government. It also calls for each federal agency to ensure that the management of historic properties in its ownership is conducted in a manner that promotes the long-term preservation and use of those properties as federal assets.

The Air Force has developed additional documents to guide installations with implementing the various regulatory requirements. Air Force Policy Directive (AFPD) 32-70, "Environmental Quality," July 20, 1994 establishes Air Force policies for achieving and maintaining environmental quality and compliance with federal environmental laws and standards. The provisions of the Policy Directive include the cleanup of damage from past activities, complying with environmental standards, and planning future activities to conserve resources and eliminate pollution. To comply with this policy directive, Air Force Historic Preservation Officers (AFHPO) and Cultural Resources Managers are to be included in environmental planning to ensure archeological and historic resources are considered.

Air Force Instruction (AFI) 32-7065, "Cultural Resources Management," June 1, 1994, provides guidelines for the protection and management of cultural resources on Air Force managed lands, and implements AFPD 32-70. The instruction encompasses all aspects of cultural resource management including compliance with federal legislation (NHPA, NAGPRA, ARPA), state and local legislation, archeological permits, cultural resources budgeting, personnel, and training. It provides guidelines for the development of Cultural Resources Management Plans (CRMPs, discussed in more detail below), determining eligibility for nominating properties to the National Register, preparing memoranda of agreement, budgeting for CRM, and defining CRM training requirements.

Historical Background for Camp Pinchot Historic District

Establishment of the National Forest and Camp Pinchot

On November 27, 1908, President Theodore Roosevelt established the Choctawhatchee National Forest (CNF) as one of the United States' eleven initial national forests. The creation of this forest, stretching across three Florida Panhandle counties, was originally administered from Forest Service District 3 out of Albuquerque, New Mexico. The Forest Service quickly moved to assign a supervisor to the newly created forest. Mr. Inman Eldredge was assigned to CNF and developed four ranger districts headquartered at Mossy Head, Rocky Bayou, East Bay, and Garnier Bayou. Garnier Bayou was the largest of the ranger stations, as it was also the seasonal headquarters for the entire CNF.

Looking for a permanent summer headquarters for the CNF, Eldredge and E. R. McKee, a Garnier Bayou district ranger, selected a site on the banks of Garnier Bayou on May 29, 1910. Almost at once, construction began and continued for three years. Administrative buildings, offices, and a ranger station were all constructed during this period. Most of what is now Camp Pinchot was in place by 1914.⁴

Maps from 1914 identify multiple structures, beginning with a dock and boathouse at the property's point. An office is located to the west, followed by four residences (currently, Buildings 1559, 1558, 1557, and 1556) labeled respectively as supervisor's residence, deputy supervisor, clerk's quarters, and ranger's quarters. Ancillary facilities include a smokehouse, stables, and wagon shed. It is believed that the stables and wagon shed are in fact buildings 1551 and 1552. Originally named "Garnier's Ranger Station," the site officially was renamed "Camp Pinchot" in honor of the first chief forester of the Forest Service, Mr. Gifford Pinchot.⁵

The architectural styles at Camp Pinchot were typical of the time period and of Forest Service construction.⁶ The Craftsmen and bungalow-style elements are present throughout Camp Pinchot. During this time period, building plans were left to the individual supervisors or rangers.

The Forest Service and Camp Pinchot

During the early years of Camp Pinchot, Eldredge and McKee supervised the activities that occurred within the CNF. The majority of their time was spent developing and overseeing the practice of leasing government timber for turpentine extraction at numerous operating stills within the CNF. At the time, the CNF was the only national forest that contained naval stores in

⁴ New South Associates, *Draft Historic American Building Survey*, 37.

⁵ *Ibid.*, 35.

⁶ *Ibid.*, 40.

commercial quantities.⁷ The outbreak of World War I proved to be a significant problem for the Forest Service, as the need for lumber and fuel forced the production of turpentine to virtually shut down.

In addition to the naval stores, CNF also studied artificial forest regeneration of longleaf pines after natural regeneration resulted in high mortality rates of the pines. Direct seeding of various pines and oaks occurred throughout the CNF and even at Camp Pinchot. Direct seeding was important as much of the "virgin forest" had been used by the mid-1920s and there was an increasing dependence on second-growth forests.⁸

Throughout the 1920s, McKee continued to work on improving resin production while conserving forest resources. It was soon discovered that turpentine was not a sustainable industry in this part of Florida and research began to shift toward concern about the forest itself.⁹

During the 1930s, poor economic times and the growing conflict in Europe led military planners to begin looking for potential military bases throughout the United States. The large and relatively uninhabited expanse of CNF land caught their attention.¹⁰ In 1933, the government leased land near Valparaiso and constructed an airport. Additional land donations were used by the Army Air Corps for a bombing and gunnery range. In 1937, this area was renamed "Eglin Field." The Army Air Corps soon expressed interest in acquiring more land from the CNF, and soon discussions ensued about a complete take-over of the CNF.¹¹ Public Law 668, dated June 27, 1940, formally transferred the CNF from the Department of Agriculture to the War Department.

Eglin Air Force Base and Camp Pinchot

After the transfer, Camp Pinchot was used as enlisted housing because of the overall shortage of military housing. In 1950, Major General William E. Kepner designated Camp Pinchot, and specifically Building 1559, as the official residence of the base's commanding general.¹² During the 1950s, foundations were in-filled, porches enclosed, and additions placed on the original facilities. These renovations and repairs continue today as the residences are maintained for Eglin Air Force Base personnel.

⁷ Eglin Air Force Base, AFDTC/EMPH, *Camp Pinchot Historic District*, nomination for National Register of Historic Places, 3.

⁸ New South Associates, *Draft Historic American Building Survey*, 81.

⁹ *Ibid.*, 86.

¹⁰ Eglin Air Force Base, AFDTC/EMPH, *Camp Pinchot Historic District*, nomination for National Register of Historic Places, 4.

¹¹ New South Associates, *Draft Historic American Building Survey*, 97.

¹² *Ibid.*, 100.

Historical Significance of Camp Pinchot¹³

Eldridge, McKee, and other rangers supervised the activities within the vast CNF from their residences and administrative offices at Camp Pinchot. At the time, the Forest Service was responsible for developing a method of exploiting forest resources on a commercial scale and incorporating the best practices in the industry. For many years, CNF was the only national forest that contained naval stores in commercial quantities because it was the only national forest containing the longleaf pine that yielded turpentine resin, and no other forest supervisors had experience in the practice of leasing government timber for turpentine extraction.

It was therefore a novel experience to manage such activities as naval stores production, and Eldredge had to plow new administrative ground. A management plan for the forest, drafted in 1910, designated naval stores production as the primary administrative objective for the forest supervisor. At the time, twenty-six turpentine stills were operating within the CNF, and Eldredge's tasks included leasing turpentine lands to private operators and then enforcing the contracts. The greatest challenge for the rangers was restricting the depth of chipping that occurred when the operators removed the resin from trees; traditional practices generally destroyed the trees, but operators resisted pressure to adopt new methods of extraction.

The buildings at Camp Pinchot served as administrative offices and living quarters for the rangers assigned to the forest. In 1917, the Forest Service Headquarters was moved to Pensacola, Florida. Eldredge transferred there, and McKee moved into the supervisor's quarters. The other dwellings housed U.S. Forest Service visitors from Washington D.C. or from the Forest Products Laboratory in Madison, Wisconsin. Students from universities with departments of forestry used the housing while conducting internships at the CNF. Vacationing Forest Service personnel also used them from time to time.

For seven months each year, the Forest Supervisor remained on the premises at Camp Pinchot, and from there, the supervisor and his assistants administered forest activities. A government telephone line was installed in the 1930s by Civilian Conservation Corps (CCC) workers. The district ranger and forest guards maintained the buildings.

Gifford Pinchot, the first chief forester of the Forest Service (1905-1910), was a gifted intellectual and far-sighted administrator who established a strong research program under the auspices of his division. By the end of the 1920s, twelve regional stations were in place through the country. Long before the Southern Forest Experiment Station had been established at New Orleans, Eldredge and McKee had begun experimenting with artificial reproduction of longleaf pine stands. They began with direct seeding of various pines and cork oak, and Camp Pinchot was among the area included in their experimentation. Disappointed with the results of this work, they turned to studies of natural forest reproduction, beginning around Camp Pinchot.

By 1939, the forest contained only one turpentine still. Over-production, low prices, and the gradual exhaustion of producing trees led to diminished production of naval stores in the national forest. Other activities, including grazing of cattle, hogs, sheep, goats, and other animals, also

¹³ Eglin Air Force Base, AFDTC/EMPH, *Camp Pinchot Historic District*, nomination for National Register of Historic Places, 3.

declined through the years. The economies of the towns surrounding the national forest, in turn, declined, and were worsened by the Great Depression.

During this poor economic time, war clouds gathered in Europe, and the Far East and America began imperceptibly preparing for conflict. Military planners began looking for potential base locations, and the relatively uninhabited vast expanse of land contained within the CNF invited their attention. No other area in the United States offered an equal amount of uninhabited lands adjacent to open waters over which weapons and aircraft could be tested.

In 1933, the government leased 137 acres of land near Valparaiso, a nearby town, for airport construction, and two years later they accepted another 1,460 acres of donated land for a bombing and gunnery range. Negotiations proceeded immediately to transfer the national forest to the War Department. In 1940, these negotiations concluded with an Act of Congress, and on October 19 of that year, the Army Air Corps took over control of the entire tract.

Camp Pinchot was a part of the 383,744 acres involved in the forest transfer. During the first ten years of military proprietorship, which encompassed the war years, the buildings were occupied by enlisted personnel. At one point, German prisoners held at Eglin Field were used to clean up Camp Pinchot, removing the waste that had been dumped in the area, trimming trees, and cutting back undergrowth.

In 1950, the base commander decided to use Camp Pinchot as the designated residence for the Air Proving Ground Commanding General. The supervisor's residence and the remaining three residential buildings were thereupon renovated for officer housing. Commanding generals have subsequently inhabited the quarters.

The Camp Pinchot Historic District is listed in the National Register of Historic Places under Criterion A for its association with the development of a national forest system and for its association with the establishment of Eglin Air Force Base, a major military component in the American effort during World War II and the Cold War. The buildings were used by the supervisors and rangers who administered the CNF, one of only eleven forests in the United States included in the original group of national forests designated under the Presidential Proclamation issued by Theodore Roosevelt in 1908.

Constructed immediately after the newly created U.S. Forest Service assumed control of the forest in 1908, the buildings within Camp Pinchot accordingly represent the full span of a century of achievement in federal forest management. In 1940, the U.S. Army Air Corps took possession of Camp Pinchot as it established Eglin Field, the nation's principle weapons and armaments proving and testing grounds. Since 1950, the primary residence at Camp Pinchot has housed the commander of Eglin Air Force Base.

Camp Pinchot has unique historical importance for the development of the Forest Service. These unique features include but are not limited to:

- The first Forest Service buildings constructed east of the Mississippi River are the buildings of the Camp Pinchot complex.
- At the time of construction, Camp Pinchot was the only Forest Service complex of buildings. The majority of Forest Service buildings at this time were constructed as individual, stand-alone facilities.
- Before 1917, Forest Service structures were typically log cabins. The majority of the buildings in Camp Pinchot were of wood-frame construction. Building 1559 was completed with tile block and stucco.
- Prior to 1917, the Forest Service had no standardized plans for ranger stations. Camp Pinchot is one of a kind.
- Building 1559 is unique with its use of tile block and stucco. It is one of only a handful of buildings in Florida that date from this time and have that type of construction.¹⁴

Camp Pinchot and the National Register of Historic Places

Camp Pinchot has both architectural and archaeological resources; in 1998, the building resources were listed in the National Register, and the archaeological resources were determined eligible for listing.

Archaeological Resources

Camp Pinchot lies over archaeological site 8OK871, a site that contains significant deposits, both prehistoric and historic. This site was deemed eligible for the National Register in 1999 under Criterion D; both the prehistoric and historic components of the site are eligible for listing.

The prehistoric component of the site lies primarily along the shore of Garnier Bayou on the northeastern part of the district. The deposits consist of a Gulf Formational Elliotts Point component that is found underlying a Late Deptford Okaloosa phase component; the latter is associated with a cultural feature.¹⁵ Later prehistoric periods are also represented at Camp Pinchot, but the significant deposits are Elliotts Point and Late Deptford:

¹⁴ Kimbrough, Interview, March 3, 2005.

¹⁵ SAIC, *Final Multiple Cultural Resources Investigations*, 331.

- The Elliotts Point Era began around 2500 B.C. and was part of the far-reaching and sophisticated Poverty Point trade network.¹⁶ Investigators found fiber-tempered sherds that they believe to represent the Elliotts Point Era.
- The Late Deptford Okaloosa phase appears to be a time of cultural awakening after some 600 years of post-Elliotts Point homogeneity.¹⁷ Artifacts recovered include lithics and tools; lithics included chipped and unmodified stone, while tools included a biface fragment, retouched flakes, double backed bladelet, and a bifacial awl.

The historic component of the site extends over much of the district and is associated with the occupation of Camp Pinchot by the U.S. Forest Service. This component is represented by features, high-density artifact areas, and metal concentrations.¹⁸ Investigators have identified numerous historic features, including a midden. Collected artifacts include aqua-colored glass fragments, round nails, brick fragments, and other architectural remains. Metal-detector surveys have found numerous metal concentrations that may lead to the discovery of other diagnostic artifacts.

Building Resources

Camp Pinchot was listed in the National Register in 1998 as the Camp Pinchot Historic District. The nomination identifies ten contributing buildings and three non-contributing buildings, as shown in Table 2 and Table 3:

Table 2 Contributing buildings in the Camp Pinchot Historic District

Building #	Current Fuction
1551	Garage
1552	Maintenance Shed
1553	Maintenance Supervisor's Office
1555	Garage
1556	Officer's House
1557	Cottage
1558	Cottage
1559	Base Commander's Quarters
1561	Boathouse
1562	Garage

Table 3 Non-contributing buildings in the Camp Pinchot Historic District

Building	Current Function
1550	Tennis Court
1564	Guest House
1565	Well House

¹⁶ Ibid., 283.

¹⁷ Ibid., 285.

¹⁸ Ibid., 288.

Land Value of Camp Pinchot

The Okaloosa County Auditor provides land values for property located across Garnier's Bayou along Longwood Drive at approximately \$400,000/acre. Using this formula, the auditor's land value for the 15.1 acres of Camp Pinchot is \$6.04 million.

Original Transfer of the Property from the Forest Service to the War Department

The Choctawhatchee National Forest was transferred to the War Department by a statute in Public Law 432, dated June 26, 1940, and Public Law 437 dated June 27, 1940. Public Law 437 reads:

“ . . . Provided, That all Government-owned land in the Choctawhatchee National Forest, Florida, is hereby transferred from the control and jurisdiction of the Forest Service, Department of Agriculture, to the control and jurisdiction of the War Department for use for military purposes: Provided further, That in the event the area hereby transferred, together with any land hereafter acquired by the War Department within or adjacent to said national forest, shall cease to be needed for military purposes, it may, by proclamation or order of the President, be restored to a national-forest status: Provided further: . . . ”

Eglin Air Force Base and Hurlburt Field Housing Program

Current Housing Available at Eglin and Hurlburt

Eglin and Hurlburt maintain housing units for 22 different pay grades, ranging from O9 (General Officer) to E1 (level 1 enlisted), spread out among 2,737 housing units. Of the 2,737 total units, 2,357 are located at Eglin, and 380 are at Hurlburt. As of February 1, 2005, Eglin had a 97.4% occupancy rate for all their housing.

Family housing for all Eglin personnel ranges from two- to four-bedroom units. At Camp Pinchot, Building 1559, the General Officer Quarters (GOQ) has three bedrooms, and the Senior Officer Quarters (SOQ), Building 1556, has two bedrooms. Building 1557, a Company Grade Officer (CGO) house, has three bedrooms. The Junior Non-Commissioned Officer Quarters (JNCOQ) at Camp Pinchot, Building 1558, has two bedrooms. SOQ and GOQ units have 100% occupancy, while both the CGO and JNCOQ units have a 97% occupancy rate.

In December 2004, Eglin provided housing for 2,313 military members. The majority of these members were from the Air Force branch, but Army, Coast Guard, Marine, and Navy personnel also lived at Eglin. At that time, nearly 2,100 enlisted members lived at Eglin. However, the

2005 BRAC Commission has recommended that 2,200 jobs be moved to Eglin, and this proposed realignment may affect the availability of housing at Eglin, Hurlburt, and the surrounding region.

Current Housing Privatization Project¹⁹

The housing privatization project involves a non-Federal Acquisition Regulation (FAR) real estate transaction with the Successful Offeror (Offeror; also known as the developer in this study), under which the government will convey 2,737 existing housing units and certain associated improvements, and lease approximately 1,615 acres of land divided among ten parcels at Eglin (including Camp Pinchot) and two parcels at Hurlburt.

The Offeror shall obtain necessary financing; provide required equity; and plan, design, develop, renovate, demolish, construct, own, operate, maintain, and manage a rental housing development, including all paving and drainage, as well as any utilities conveyed to or constructed by the Offeror, for a minimum of 2,155 military families for 50 years.

The 2,155 required housing units are referred to as the “privatized units.” All 2,737 existing units will be privatized; however, 2,597 of those units will be demolished and replaced with 2,015 new units, and 140 existing units will be renovated or retained as is. The 2,015 new units will be constructed throughout the twelve parcels, including Camp Pinchot. All privatized units shall be designated for occupancy by pay grade, and Referral Rent (rent for military members referred by the installation housing offices) shall not exceed the Basic Allowance for Housing (BAH) at the dependent rate for the designated military pay grade, minus an amount sufficient to cover 110% of average estimated utility charges. The Offeror will be paid rent directly from the military members by allotment retroactively, one month in arrears.

The preferred alternative for Camp Pinchot is the demolition of the four housing units and ancillary buildings and the construction of one GOQ and two SOQs in the historic district. The Request for Proposal (RFP) states that the Offeror may, subject to the terms and conditions of the MOA, construct these three quarters in the district and up to two more SOQs along the shoreline, outside of the historic district..

The RFP also requires open areas to encourage creative play and learning for children and a pleasant outdoor experience for adults. The recreation and common areas shall be open for viewing with no secluded areas. Recreation facilities shall be sited where easily accessible while causing minimum disturbance to nearby occupants. Additionally, the Offeror must construct and maintain a centrally located management office on the Project Site and also may construct and maintain a remote management office on the Project Site.

¹⁹ Jones Lang LaSalle, *Privatization of Military Family Housing*, 1.

Military Family Housing Choices

Available Housing Options

A 2003 Housing Requirements and Market Analysis plan showed that a significant amount of affordable property was available in the Fort Walton Beach area. However, because of increased housing and construction costs, recent hurricane activity, and increased land values and constraints, housing costs have jumped dramatically and have continued to rise steeply each year since 2003. The area now has a shortage of quality housing units that military personnel at Eglin and Hurlburt Field can afford. Increases of 9–18% in the Basic Allowance for Housing (BAH) cannot keep pace, and military members are choosing to live on base.

Military Housing Standards

The Air Force has been charged with providing all military members with a minimum standard of housing comparable with the private sector. The standard consists of program requirements, as well as size requirements, and is applicable to all new, renovated, and historic housing.

Because of the historic designation of the buildings, spending to bring the Camp Pinchot houses up to current standards exceeds that allowed for non-historic units. However, the house must be brought up to standard, with “reasonable” provisions to maintain historic character-defining features in coordination with the SHPO.

A major issue with the Camp Pinchot historic houses is that all other housing on the base will consist of new construction or recent construction from the past five years, and thus already meets or will meet the standard. Although the overall gross square footage of each Camp Pinchot house can fit a specific grade, individual program requirements will either be above or below standard, due to existing interior wall configuration. Even with a complete rehabilitation, there will be some deviation from the standard program. As a result, the perception could arise that the military members assigned to Camp Pinchot will receive worse housing than their peers.

To avoid the extensive costs involved in rehabilitating historic housing to meet current standards, which still would result in housing that deviates from the standard, Eglin prefers to demolish the existing buildings and construct all new standard housing.

Overall Standards

The goal of Air Force housing is to provide “long-term functionality, maximum utility, durability, economy of maintenance, and a safe, healthy environment”²⁰ for military members and their families. To implement this goal, the Air Force Housing Guide states that “all

²⁰ Secretary of the Air Force, *US Air Force Family Housing Guide*, 100.

installations...must plan, program, design and budget replacement and new construction units”²¹ that fall within program and net and gross square footage standards established in the Guide.

The Guide describes programs for various grades, ranging from junior enlisted to general officer. Program requirements include the number and size of bedrooms and bathrooms, as well as the size and capacity of kitchens, dining rooms, and closets. The Guide provides target program sizes for new and renovated units, along with minimum and maximum sizes. This range allows flexibility in renovation projects and takes into account local building conditions.

The Guide encourages installations to exceed minimum standards whenever feasible. Where existing units do not meet size and/or program requirements, the Guide allows alterations, additions and/or conversion to another grade. Exceeding the maximum standards is possible, but requires Air Force approval as well as Congressional notification.

The Guide generally requires that all units be replaced if renovation costs exceed 70% of the cost to construct a new unit of equivalent program and size. However, it should be noted that historic housing units are exempt from this policy²². The Guide also requires that Eglin take into account the consequences of their actions on historical housing facilities and coordinate all work with the SHPO. The Guide also makes note of the need to preserve the setting of historical housing facilities as well as associated archaeological sites.²³

Appendix C contains descriptions of the standard sizes for the housing grades that would most likely occupy the existing housing units (GOQ, SOQ, and JNCOQ), based on gross square footage and program.

Funding Issues

For construction purposes, Eglin can tap a variety of funding sources for different types of projects. The primary funding sources applicable to this study are Demolition Program funds and Military Construction (MILCON) funds. Currently, however, funding is scarce and is not guaranteed. Eglin’s tenants may also provide funding to renovate facilities that the tenants occupy. For example, if Eglin leases a building to the Navy EOD school, the Navy may be able to provide funding to assist Eglin in renovating the building.

Demolition Funds

The Air Force Demolition Program provides demolition money for the entire Air Force. All submitted demolition projects are scored, with funding allotted accordingly. Scoring is based primarily on the savings generated by demolition versus keeping the building in operation. For this criterion, demolition of the Camp Pinchot housing facilities will likely score high because of current and ongoing maintenance expenditures. The scoring system also considers consolidation

²¹ Ibid., 100.

²² Ibid., 100.

²³ Ibid., 228.

and elimination of unused space. The houses in the proposed demolition project would not score well since they are proposed for replacement, sometimes with larger units, although the storage facilities may score better.

Military Construction (MILCON)

MILCON typically involves new construction projects of large dollar value. Funding is through congressional appropriation and typically requires at least a five-year lead time. The five-year lead time is a minimum if the project is a high priority to the Air Force and well supported. Other projects may require a much longer lead time. All submitted projects compete against each other and are scored on a variety of criteria, including anti-terrorism protection, use of other funding, sustainment and facility replacement values, operational priorities, and other considerations.

The housing privatization program is separate from MILCON funding. However, possible adaptive reuse options, such as conversion to offices, curation facilities, and/or interpretive center, would likely require the use of MILCON funds. These facilities may not compete well against projects, as the military in general has shifted priority from Quality of Life projects to Anti-Terrorism/Force Protection projects.

Housing Operations and Maintenance (O&M)

The funding for O&M has been limited to \$3.5 and \$4 million per year to accomplish maintenance and repair on the 2359 housing units. O&M funding is based on projected total annual maintenance requirements within the housing area, and the expenditures include such things as roof repairs, housing maintenance, grounds maintenance, street repairs and electrical line maintenance. O&M funding has been limited across the Air Force due to budget restraints.

Congress has imposed a spending limitation on individual housing units called a "threshold." These thresholds range from \$35,000 for each GOQ to \$20,000 for other housing units, including SOQs.²⁴ The total annual expenditure for a given unit including O&M, minor and major alterations, and upgrade projects cannot exceed the annual threshold for any one unit without Congressional notification.

Every Air Force base evaluates and rates its infrastructure with the goal of maintaining an average score of 75 out of 100. Infrastructure assessed includes buildings, pavement and grounds, water/wastewater, utilities, and airfields. Eglin's buildings have scored a 65 on average in recent years. As a result, without doubling the O&M funds received in a given year, there are insufficient funds to bring building scores up to 75.

²⁴ Ibid., 118.

Historic Building Funding Sources

In past years, Camp Pinchot would have been eligible for federal preservation grants from the Legacy Program. This was the program that Eglin used to partially fund the rehabilitation of the Cape San Blas lighthouse and keeper residences. However, this program has not been sufficiently funded in recent years to disperse funds for major preservation projects.

Certified local governments and non-profit organizations, however, are eligible to receive a variety of grants from federal and state agencies. To take advantage of these funding sources, Eglin would have to lease the property to a local government entity (such as a county), which then subleases the property to a non-profit that applies for preservation grants. This source was successfully used to partially fund the rehabilitation of the Cape San Blas lighthouse and keeper residences. The lease option is further explored in the next chapter.

Another alternative is for Eglin to accept donations of cash and/or labor from a “Friends of” group interested in the preservation and maintenance of Camp Pinchot. Air Force Instruction (AFI) 51-601 generally allows the Air Force to accept gifts, subject to the following exceptions:

- Acceptance involves the expenditure or use of funds in excess of amounts appropriated by Congress.
- The offered item is extremely dangerous.
- The offered item is in poor taste.
- Acceptance of the gift would raise a serious question of impropriety in light of the donor's present or prospective business relationships with the Department of the Air Force.
- The cost of acceptance and maintenance is disproportionate to any benefit derived from it.
- The acceptance of the gift would not be in the best interest of the Air Force.

However, if such a group were to provide ongoing gifts to Eglin, there could be a problem with the perceptions of the public and command staff as to why a group should be subsidizing the Department of Defense. The gift might then fall under the first exception listed above and be rejected.

This page intentionally left blank.

Chapter 3

Adaptive Reuse Alternatives

Criteria to Determine Reasonability

The following describes the various alternative reuse options and whether or not they were considered reasonable alternatives. To be considered reasonable, the option had to meet the criteria listed below. A reasonable option:

- Minimizes Eglin's cost of maintenance and repair: All options contain ongoing operation and maintenance costs that must be funded through Eglin or another organization, which could include military members, tenants, the housing developer, or another agency. The proposed option should either lessen the funding Eglin must expend or allow the cost of operations and maintenance to be borne by other sources.
- Is straightforward to implement: Some proposed uses require the participation of multiple other agencies, while other uses require only Eglin; the more agencies that are consulted and are required to take legislative action, the more complicated the process.
- Has a reasonable timeframe for implementation: For this report, a "reasonable timeframe" is defined as a span no longer than the time it will likely take to conclude the housing privatization option for Camp Pinchot. According to housing privatization documents on the official Eglin privatization web page, the demolition and construction of all the new units must be completed by 31 December 2014.²⁵
- Is likely to be approved and/or funded: Some alternative uses demand that other agencies approve and fund the proposed project; this report considers the likelihood of this approval based on recent past history of similar requests.
- Ensures the availability of funds to maintain the facilities in their historic condition: This criterion evaluates how the primary end user(s) would fund ongoing maintenance; reasonable revenue streams may include self-sustaining recreational use fees or profits from other related transactions.

For each alternative, the following questions are discussed:

- Who are the proponents of the alternative? For this report, proponents are defined as the organization that thought of the idea and those organizations that would support the option.
- What are the anticipated costs of each alternative? The anticipated cost estimates were developed using national cost-estimating guidelines and standards. A total cost for each alternative is provided at the end of the section for each option, and detailed breakdowns are in Appendix A.
- How would each alternative be funded? This section lists the organization, federal or private, that would be required to provide funding for the alternative.
- How does the proposed reuse fit into the overall housing privatization plan? And, by extension, would the proposed alternative conflict with the adjacent family housing? The

²⁵ Hurlburt Field and Eglin AFB Housing Privatization website:
http://jllpsc.com/Hurlburt_Field___Eglin_AFB/hurlburt_field___eglin_afb.html

impetus of this project is the housing privatization program that Eglin is currently undertaking. The goal of a case alternatives report is to investigate all reasonable alternatives. As such, this report develops ideas that are not necessarily integral to the housing privatization plan. This report also identifies how the proposed alternative fits in with the housing privatization program, as well as whether the alternative enhances or detracts from the new neighboring housing.

Air Force Occupancy Options

In the following options (base recreational facility, mothballing, base restaurant, offices, and temporary lodging facilities), the Air Force retains control and ownership of the land and buildings.

Base Recreational Facility

Eglin Air Force Base and Hurlburt Field each operate independent Family Camp facilities. These camps allow military members and their families to rent space to park and connect a recreational vehicle while on vacation or visiting the base. Eglin maintains facilities by a lake that include associated recreational opportunities. Hurlburt Field's facilities are not on waterfront property and include only lodging. Vacation rentals in the area can be very expensive during peak season; thus, Air Force family camps are very popular and are usually at capacity.

Since Hurlburt Field's facilities are limited, Mr. Neil Howard, Hurlburt Field's Services Manager, is very interested in converting the Camp Pinchot property into a Family Camp facility that could be used by Hurlburt Field personnel. Hurlburt Field Services runs its own maintenance personnel independent from Civil Engineering. Therefore, they are able to pay *all* maintenance expenses with facility rental fees.

There are several concerns with converting Camp Pinchot into a Family Camp facility.

- A Family Camp typically involves numerous recreational vehicles parked closely together over a large open expanse. This type of camp would not work at Camp Pinchot and is not proposed under this alternative.
- Use as a Family Camp typically implies hard wear on the buildings. Examples of Family Camp buildings leased by the Air Force generally have concrete floors and "rustic" décor that are easy to maintain between users.
- Private homeowners around the bayou, as well as occupants of the proposed general/senior officer housing area, may have noise concerns about additional groups of vacationers, motor vehicles, and motorized water equipment in an area that already sees heavy use during the peak season.

This alternative envisions converting the buildings of Camp Pinchot into rental cottages, creating a historic Camp Pinchot resort: Camp Pinchot would be marketed as a historic alternative to a

traditional military Family Camp. Military rental rates would compare to a historic inn, rather than a campground cabin or recreational vehicle space rental, and the facilities would be renovated to meet vacation rental standards. Unlike the rustic décor of other Air Force rentals, Camp Pinchot would maintain a décor similar to that of the bed-and-breakfast vacation rentals found in the surrounding communities and would include carpeted or tiled floors, finished walls, kitchen facilities, and furniture such as couches, tables, and beds.

To limit ground-disturbing activities, no new parking spaces for renters or recreational parking pads would be constructed. Rental agreements would need to note that car or truck parking near each rental is limited. Current parking areas near buildings 1558 and 1552 could serve as overflow parking for renters. Regulations would need to be strict in banning overnight recreational vehicle parking on site. A boat launch would not be constructed—boating opportunities at Camp Pinchot would be limited to non-motorized watercrafts.

The grounds and supporting buildings of Camp Pinchot could easily be used for vacation rental purposes. Recreational facilities include swimming areas, rowboats by the boathouse and dock, a tennis court, open green space for playing ball, storage buildings that could be converted for basketball or table game use, and a catering kitchen that can support picnics and cookouts on the lawn. Other buildings could be retained for equipment storage and maintenance needs.

Utilities would be maintained in their current condition. No new water or sewer lines would be constructed on Camp Pinchot. The only utility relocation that would be required would be the overhead electric line that generally runs from Building 1553 northwest to Route 189. Under the housing privatization plan, new family housing is to be constructed where the current utility lines are to run; thus the current lines will have to be relocated. It is proposed that the overhead electric line be relocated along the west side of the access drive, run southwest along the outside of the current Camp Pinchot property line fence, and then tie into the existing lines. According to current archaeological investigations, the relocated line would be located in "Areas of No Recovery" and would therefore not require archaeological investigations.

The process to convert the Camp Pinchot Historic District buildings into vacation rentals could take over a year. Services personnel must prepare a lengthy application form that is submitted to the Air Force on a set schedule. This application must contain basic calculations for all costs associated with the proper maintenance of the facilities. The application could be prepared jointly by Eglin and Hurlburt Field, which would then be reviewed by their respective commands (AFMC and AFSOC). If the Air Force decides that the proposal is likely to see a good return on investment, then the Air Force contracts for a formal feasibility study.

If both commands approve the project and the study shows the project as viable, the commands will propose leasing rates, and the project will be submitted for funding before a Pentagon committee that reviews all such requests. The committee will likely have a favorable impression of an application that has been approved by two separate commands. The wait for funding could also take over a year, and may never be authorized.

Table 4 Work required for base recreational facilities

• Buildings 1552, 1553, 1561, 1564, and 1565	No work
• Building 1555	Renovate into residential loft facility.
• Buildings 1551 and 1562	Renovate into small one-bedroom facilities.
• Buildings 1556, 1557, 1558, and 1559	Renovate into historic inn-type facilities with no additions.
<ul style="list-style-type: none"> • All renovation work on the houses includes/assumes the following: <ul style="list-style-type: none"> o New asphalt shingle roof o Replacement of 50% of exterior walls and siding o New double-hung metal windows with simulated 6/6 lights o New metal exterior doors o Insulation added to exterior walls o Allowance for furnishings similar to that already in Building 1564 	
<ul style="list-style-type: none"> • Overall site utility work consists of the following: <ul style="list-style-type: none"> o Storm, sanitary, and potable water to remain as is o Overhead electric to be relocated to along access drive from the highway and tied into existing utility poles 	
• Site work	No work.
• Archaeological mitigation	No work.

Advantages of base recreational facility

- Land remains under Air Force control and no additional Anti-Terrorism / Force Protection (AT/FP) measures are needed.
- Conversion would provide desirable recreational facilities.
- Project could be jointly administered and funded by Eglin and Hurlburt Field.
- Buildings continue to be used as housing with minimal alterations.
- Rental fees can be set to pay for *all* maintenance and repair work.

Disadvantages of base recreational facility

- Conversion requires extensive paperwork.
- Conversion could take over two years to implement.
- There is no guarantee that the project would be approved and/or funded.
- Family Camp use could be very hard on the buildings.

Proponents of base recreational facility

- Hurlburt Services
- Consulting Parties

Estimated costs of base recreational facility

- Initial estimated cost is \$993,846. For detailed cost estimates, see Appendix A.
- Total estimated O&M cost for the next 50 years is \$19,659,300. For details on how this cost was calculated, see Appendix B.

Funding sources

- Air Force Services via joint AFMC and AFSOC application

Compatibility with housing privatization initiative

- Resort camp does not fit in with current housing privatization plan.
- Resort camp would be a compatible land use next to family housing.

Mothballing

The mothballing option would be implemented only under the following circumstances: Camp Pinchot facilities are vacant due to completion of the privatization project, and no developer is willing to use the site as is; no funds have been allocated to adaptively reuse the facilities; and the Encroachment Committee recommends against leasing or transfer of the property. Mothballing can be a necessary and effective means of protecting both the interior and exterior features of a historic property while base planners develop plans for the property's future. However, it has been noted that vandalism may be an issue with a collection of vacant buildings adjacent to a family housing area.

Work required for mothballing

The following work requirements are taken from a technical preservation brief on mothballing historic buildings that was prepared by the National Park Service. The brief, with additional information on mothballing, is available at <http://www.cr.nps.gov/hps/tps/briefs/brief31.htm>.

- Document the architectural and historical significance of the building. This step has already been accomplished through HABS documentation.
- Prepare a detailed condition assessment of the building that includes a structural and termite damage assessment.
- Structurally stabilize the building, based on a professional condition assessment.
- Check for and exterminate or control any pests, including termites, carpenter ants, and rodents.
- Protect the exterior from moisture penetration. This work includes painting exposed wood features, such as siding, doors, windows, and trim.
- Secure the building and its component features to prevent vandalism or break-ins.

- Provide adequate (active) ventilation to the interior of buildings that currently lack an HVAC system. This work is performed in place of installing air conditioning to prevent excess temperature/humidity accumulation during the summer months.
- Activate the existing heating system to provide minimal heat in the winter.
- Develop and implement a maintenance and monitoring plan for protection, which includes:
 - On a weekly basis, routine exterior patrol by facilities personnel to look for further deterioration. The weekly patrol includes, but is not limited to, the following tasks:
 - Check doors and windows for breakage
 - Check for graffiti or vandalism
 - Check for exterior wall damage
 - On a monthly basis, routine exterior and interior patrol by facilities personnel to look for leaks or signs of further deterioration. The monthly patrol includes all the tasks performed during the weekly patrol plus the following work, which includes, but is not limited to, the following tasks:
 - Check for musty interior air
 - Check for evidence of pest intrusion
 - On a quarterly basis, conduct routine exterior and interior patrols and inspect other building systems. The quarterly patrol includes all the tasks performed during the monthly patrol plus the following work, which includes, but is not limited to, the following tasks:
 - Check heating and ventilation equipment to ensure that the equipment is/will be able to function properly
 - Check crawlspaces for pests
 - Check roof for missing or loose shingles
 - Check gutters and downspouts

Advantages of mothballing

- Property remains under Air Force control for future mission considerations.
- All remaining historic features (interior and exterior) are secured from further deterioration.
- Buildings will not deteriorate as quickly and cause higher renovation costs in the future.
- Eglin, the State of Florida, and the U.S. Forest Service do not lose a historically significant complex.

Disadvantages of mothballing

- 96 Civil Engineer Group (96 CEG) must expend funds up front to implement mothballing.
- Some ongoing maintenance funds are required.
- Continued labor is required for ongoing planning work for potential reuse.
- Since family housing will be directly adjacent, vandalism may be a problem.

Proponents of mothballing

- Consulting Parties

Estimated costs of mothballing

- Estimated initial cost is \$235,825. For detailed cost estimates, see Appendix A.
- The total estimated cost for ongoing O&M for the next 10 years is \$395,620. For details on how this cost was calculated, see Appendix B.

Funding sources

- 96 CEG

Compatibility with housing privatization initiative

- Mothballing does not fit into the housing privatization plan.
- If mothballing were temporary, it would be a compatible land use with the family housing. The proposed reuse after mothballing would then have to be analyzed. If mothballing became a long-term solution, it would not be considered compatible to have vacant buildings next to family housing.

Demolition of Buildings, with Land Converted to a Park

This option involves demolishing all but one (Building 1561, the Boathouse) of the existing facilities in the Camp Pinchot Historic District and completing minimal new work to convert the area into a park. The former building locations would be graded to match existing grade and then seeded. Picnic tables, benches, and trash receptacles would be placed in various locations throughout the site. The existing asphalt paving (roadways and sidewalks) would be left in place to be used as walking trails. No new trails or other ground-disturbing activities would take place.

To minimize costs, maintenance would be minimal and include trash pickup once a week and mowing every two weeks. This option assumes that the work and the land remain outside of the privatization project, although residents would most likely be the primary users of the resulting picnic area. In addition, the SHPO may propose other forms of documentation to mitigate the loss of the buildings, such as public brochures, video, and so forth.

Table 5 Work required for demolition, with land converted to park

<ul style="list-style-type: none">Buildings 1551, 1552, 1553, 1555, 1556, 1557, 1558, 1559, 1562, 1564, and 1565	Demolish.
<ul style="list-style-type: none">Building 1561	No work.
<ul style="list-style-type: none">Site work	<ul style="list-style-type: none">Restore the footprint areas of the demolished buildings back to turf.In locations facing the bayou, install seven standard and one accessible recycled-plastic picnic tables.Throughout the site, install eight standard recycled-plastic park benches.Install eight recycled-plastic trash receptacles.For the next 50 years, provide minimal maintenance in the form of trash pickup once a week and mowing every two weeks.
<ul style="list-style-type: none">Archaeological mitigation	<ul style="list-style-type: none">Conduct archaeological data recovery of the area immediately around the buildings that will experience ground-disturbing activities from the demolition.Conduct archaeological monitoring throughout the demolition and subsequent removal of building debris.Conduct archaeological data recovery for any unexpected discoveries.
<ul style="list-style-type: none">Historic building mitigation	Historic American Building Survey (HABS) documentation has been undertaken for the facility and could qualify as building mitigation. However, the SHPO may also propose other forms of documentation.

Advantages of demolition, with land converted to park

- Remains under Air Force control for future mission considerations.
- Minimizes maintenance costs associated with the property.
- Provides green space and a recreational area for the new family housing area as well as for Eglin employees.

Disadvantages of demolition with park

- 96 CEG must expend funds to implement demolition and its associated mitigation work.
- 96 CEG must provide ongoing O&M costs for monthly maintenance.
- Eglin, the State of Florida, and the U.S. Forest Service will lose a historically significant complex.

Proponent of demolition with park

- 96 CEG

Estimated costs of demolition with park

- Estimated cost is \$1,202,544. For detailed cost estimates, see Appendix A.
- Total estimated cost for ongoing O&M for the next 50 years is \$ 9,284,203. For details on how this cost was calculated, see Appendix B.

Funding source

- 96 CEG

Compatibility with housing privatization initiative

- Demolition and green space is in the current housing RFP, although new construction is called for at Camp Pinchot site.
- The resulting recreational open space is compatible with a family housing area.

Base Restaurant

Eglin Services operates several restaurants for use by base personnel and the public. The on-base facilities include the Officers Club and Enlisted Club. The off-base restaurants, such as the Beach Club, were damaged by recent hurricanes and have not reopened.

One option is to renovate Building 1559, the largest facility, and convert it into a restaurant that takes advantage of the waterfront location. This conversion would involve extensive renovation to meet new building and health codes and the possible construction of an addition to accommodate a commercial kitchen. Site work would also include new utilities and parking.

This option was deemed not reasonable because Eglin Air Force Base Services has determined that any off-base restaurant would not be self-sustaining. Eglin must market to a specific segment of the population and pay higher wages than a local restaurant would. The subsidies that offset these higher labor costs were eliminated in the early 1990s.

On-base restaurants have been successful since they have the advantage of proximity to large numbers of base personnel. Off-base restaurants are often not patronized regularly by base personnel since, on a base the size of Eglin, it is not possible to commute and eat within a lunch

hour. As a result, Eglin has no plans to reopen the off-base restaurants that were damaged in 2004 by hurricanes, let alone to open a new off-base restaurant.

Work required for a base restaurant

- Extensive interior renovations are required to meet restaurant requirements, with possible construction of new addition to accommodate commercial kitchen.
- Upgrade of all utility systems is required: new underground electric, new sanitary, new storm, and new potable water lines.

Advantages of a base restaurant

- Conversion would result in a facility that could be used by Eglin and Hurlburt Field personnel, as well as the general public.
- Waterfront location could be a popular draw for a restaurant.
- Eglin, the State of Florida, and the U.S. Forest Service do not lose a historically significant complex.

Disadvantages of a base restaurant

- Extensive renovation costs need to be incurred for the conversion. The costs would be a MILCON request, which may not be funded.
- Interiors could be greatly altered. Exteriors may also be significantly altered.
- Proposal does not address the reuse of other buildings on the site.
- 96 CEG is still responsible for exterior maintenance and major repairs.
- Eglin has determined that restaurant use is not self-sustaining and therefore not reasonable.

Proponents of base restaurant

The base restaurant idea was suggested by:

- 96 CEG
- Consulting Parties

Estimated costs of base restaurant

No costs were developed because a base restaurant is not a reasonable alternative.

Funding sources

Not investigated because a base restaurant is not a reasonable alternative.

Compatibility with housing privatization initiative

- A base restaurant is not in the current housing privatization plan.
- A base restaurant would be a compatible land use near family housing.

Eglin Agency Offices

The Camp Pinchot site has an existing association with the Eglin offices for Housing, Cultural Resources, and Natural Resources, as the site includes resources of interest to all of these agencies. As such, the mission of these offices aligns well with the area, and an option was developed to locate offices for them at Camp Pinchot. Agencies related to housing have expressed an interest in relocating to larger facilities or establishing a branch facility off base that is close to the proposed new housing developments; these agencies include the Eglin Housing Office (which requires about 4,000 square feet), a Human Resources branch office, and a Home Daycare Licensing branch office. The offices for Cultural Resources and Natural Resources have also expressed interest in relocating at Camp Pinchot. Other Eglin organizations were not consulted on their need for office space because it did not appear that their mission was compatible with the area.

The Eglin Housing Office, currently located in Building 10800, is out of space with no opportunity to expand. The multiple buildings in the Camp Pinchot Historic District would allow the housing office to expand as needed. The Human Resources branch office and Home Daycare Licensing branch office would be convenient for personnel living in off-base housing areas, such as the units proposed for the land adjacent to the Historic District. The branch offices would allow personnel, especially recently transferred ones, to use these services without having to go through base security. A Cultural and/or Natural Resources office would allow on-site stewardship of important resources by Eglin personnel.

This proposal was ultimately deemed not reasonable because it involves incurring expenses up front for projects that may not get funded. Housing has requested a larger facility in the past, but has not yet been funded. In addition, 96 CEG will also have to continue maintaining the facilities at great expense.

Table 6 Work required for Eglin agency offices

• Buildings 1551, 1552, 1553, 1555, 1561, and 1562	No work.
• Building 1565	Demolish.
• Buildings 1556, 1557, 1558, 1559, and 1564	Renovate into offices with no additions.
<ul style="list-style-type: none">• All renovation work on the houses includes/assumes the following:<ul style="list-style-type: none">○ New asphalt shingle roof○ Replacement of 50% of exterior walls and siding○ New double-hung metal windows with simulated 6/6 lights○ New metal exterior doors○ Insulation added to exterior walls○ No structural reinforcement of floors	

<ul style="list-style-type: none"> Overall site utility work consists of the following: <ul style="list-style-type: none"> New storm, sanitary, and potable water lines feeding from existing systems along the highway Existing septic tanks left in place and filled with concrete New buried electric lines that connect to a meter located in the new housing area 	
<ul style="list-style-type: none"> Site work 	Demolish existing tennis court and construct parking lot on site.
<ul style="list-style-type: none"> Archaeological mitigation 	Data recovery needed at all areas of ground disturbing activities, such as trenches and excavation for new utility lines.

Advantages of Eglin agency offices

- Conversion provides convenient housing-related offices near new housing areas, and/or environmental offices on site with important resources.
- Eglin, the State of Florida, and the U.S. Forest Service do not lose a historically significant complex.

Disadvantages of Eglin agency offices

- Renovation costs incurred in converting homes to offices will likely be a MILCON request, which may not be funded.
- Not all buildings can be reused.
- 96 CEG is responsible for all maintenance and repairs.

Proponents of Eglin agency offices

- 96 CEG/CEH
- 96 CEG/CEHP
- 96 CEG/CEVS

Estimated costs of Eglin agency offices

No costs were developed because Eglin agency offices are not deemed a reasonable alternative.

Funding Sources

Not investigated because Eglin agency offices are not a reasonable alternative.

Compatibility with housing privatization initiative

- Eglin agency offices are not in the current housing privatization plan.
- Offices located next to family housing would be appropriate for the three proponents but not other Eglin agencies.

Temporary Lodging Facilities (TLFs)

Temporary Lodging Facilities (TLFs) at Eglin consist of one-bedroom, two-bedroom, and three-bedroom housing facilities for use by Air Force personnel on Permanent Change of Station. These facilities are used by incoming and outgoing personnel who need temporary lodgings while their possessions are in transit. The maximum stay is 30 days, although a seven-day extension can be provided if space is available. The typical stay is one to two days.

Each TLF is fully furnished, including cookware and linens. Full-service daily housekeeping is provided, with the exception of dish washing. Generally, TLFs are run like hotels. At Eglin, military personnel pay a flat fee of \$38.00/night, regardless of rank or size of the lodging. Due to the high cost of housing around the base at this time, Eglin's TLFs are 98% to 99% occupied during the peak season (May–October) with a 92% to 93% annual average occupancy rate. There is often a waiting list.

Eglin currently maintains 87 TLF units. Of these, 47 were built in the mid 1940s. The remaining 40 are "relocatable" units that are bolted together and not considered permanent structures. The TLFs consist of 53 one-bedroom units, a single three-bedroom unit, and 31 two-bedroom units. Mr. Tom Harmon, the TLF manager at Eglin, thought that he could easily rent the houses in the Camp Pinchot Historic District all year as TLFs.

TLFs are maintained with a combination of appropriated and non-appropriated funds. Non-appropriated funds are generated by the flat fee of \$38.00 per night. The flat rate is set for each base and reviewed every two years. This amount also includes \$6.00 that Eglin must pay to the Air Force as an assessment fee. The remaining \$32.00 pays for housekeeping and the replacement of finishes, furniture, and equipment on a set schedule.

Appropriated funds (Operations and Maintenance) are used to cover grounds maintenance and major repairs and upgrades. Major work includes roof replacements, window replacements, and repairs to utility systems. Typically, this work is covered by 96 CEG.

Conversion of the Camp Pinchot Historic District would require minimal work to the buildings, which already function as lodging facilities. TLF already maintains Building 1564, the Ivy Lodge house next to Building 1559, the GOQ. The support buildings already in use for base storage and groundskeeping equipment could continue in their current use. Support buildings used by current residents could be renovated into additional TLFs or mothballed for future use.

Utilities would be maintained in their current condition. No new water or sewer lines would be constructed on Camp Pinchot. The only utility relocation that would be required would be the overhead electric line that generally runs from Building 1553 northwest to Route 189. Under the housing privatization plan, new family housing is to be constructed where the current utility lines are to run; thus the current lines will have to be relocated. It is proposed that the overhead electric line be relocated along the west side of the access drive, run southwest along the outside of the current Camp Pinchot property line fence, and then tie into the existing lines. According to current archaeological investigations, the relocated line would be located in "Areas of No Recovery" and would therefore not require archaeological investigations.

However, use of the Historic District buildings as TLFs is ultimately not reasonable because funding for overall maintenance and repairs would still come from base Operations and Maintenance.

Table 7 Work required for TLFs

• Buildings 1551, 1552, 1553, 1555, 1561, 1562, 1564, and 1565	No work.
• Buildings 1556, 1557, 1558, and 1559	Renovate into standard hotel units.
<ul style="list-style-type: none"> • All renovation work on the houses includes/assumes the following: <ul style="list-style-type: none"> ○ New asphalt shingle roof. ○ Replacement of 50% of exterior walls and siding. ○ New double-hung metal windows with simulated 6/6 lights. ○ New metal exterior doors. ○ Insulation added to exterior walls. ○ Allowance for furnishings similar to a standard hotel. 	
<ul style="list-style-type: none"> • Overall site utility work consists of the following: <ul style="list-style-type: none"> ○ Storm, sanitary, and potable water to remain as is. ○ Overhead electric to be relocated to along access drive from the highway and tie into existing utility poles. 	
• Site work	No work.
• Archaeological mitigation	No work.

Advantages of TLFs

- No additional AT/FP measures needed because land remains under Air Force control.
- Conversion would relieve Eglin of a current shortage in TLF units and provide more desirable units.
- TLF fees would pay for ongoing interior maintenance.
- Buildings continue to be used as housing with minimal alterations.
- Eglin, the State of Florida, and the U.S. Forest Service do not lose a historically significant complex.

Disadvantage of TLFs

- Base Operations and Maintenance funding is still responsible for exterior/grounds maintenance and major repairs.

Proponents of TLFs

- 96 CEG
- 96 SVS

Estimated costs of TLFs

No costs were developed because TLFs are not a reasonable alternative.

Funding sources

Not investigated because TLFs are not a reasonable alternative.

Compatibility with housing privatization initiative

- TLFs are not in the current housing privatization plan.
- TLFs would be a compatible land use next to family housing.

Housing Privatization Options

The Housing Privatization options are ones that could be implemented by the housing developer. The developer pays all building rehabilitation costs, as well as ongoing maintenance and repairs. In return, the developer generates income from leasing the buildings for the next 50 years as housing, as offices, or for tenant recreational use. If the rehabilitation costs of a particular building are a significant percentage of its cost basis, the developer, as a private concern operating income-generating historical property, could be eligible for federal rehabilitation tax credits to help offset the cost of the work. The Florida SHPO knows of at least two examples where a housing privatization project utilized tax credits.

Due to the selection schedule, no discussions were possible with any of the prospective bidders or the contract manager. The following recommendations were based on requirements within the current RFP.

Use by Housing Developer

The developer could utilize the Camp Pinchot Historic District buildings to fulfill some of the program requirements in the RFP. Possible program areas include open space, housing offices, and maintenance facilities. Eglin would lease the land to the developer, who would then be responsible for improvements and maintenance.

In conjunction with this option, the Eglin housing office could also be located at this site. The Eglin agency would rent one or more buildings from the developer, who would still be responsible for maintenance and repairs. The lease must be renewed each year, and the funds would still come out of general operations and maintenance. 96 CEG must also make the commitment to prioritize the lease to ensure that it will be funded each year.

The storage buildings could remain for maintenance or vehicular storage. Because the buildings are close to family housing, the maintenance function could not be the developer's central purpose, as residents would object to the noise and dirt from heavy equipment and vehicles.

Feasible recreational activities include: tennis court, open green space, boathouse, and the renovation of some of the garage buildings for table games, such as pool, table tennis, and table sport games. If some of the houses are not used for offices, they could be used for a community center, lounge, or place for table games.

Table 8 Work required for use by housing developer

• Buildings 1551, 1552, 1553, 1555, 1561, and 1562	No work.
• Building 1565	Demolish.
• Buildings 1556, 1557, 1558, 1559, and 1564	Renovate into offices.
<ul style="list-style-type: none"> • All renovation work on the houses includes/assumes the following: <ul style="list-style-type: none"> ○ New asphalt shingle roof. ○ Replacement of 50% of exterior walls and siding. ○ New double-hung metal windows with simulated 6/6 lights. ○ New metal exterior doors. ○ Insulation added to exterior walls. ○ No structural reinforcement of floors. 	
<ul style="list-style-type: none"> • Overall site utility work consists of the following: <ul style="list-style-type: none"> ○ New storm, sanitary, and potable water lines feeding from existing systems along the highway. ○ Existing septic tanks left in place and filled with concrete. ○ New buried electric lines that connect to a meter located in the new housing area. 	
• Site work	Demolish existing tennis court and construct parking lot on site.
• Archaeological mitigation	Data recovery needed at all areas of ground disturbing activities, such as trenches and excavation for new utility lines. Data recovery must be completed prior to any ground disturbing activities. Eglin or the developer could be responsible to undertake and fund data recovery.

Advantages of use by housing developer

- The housing developer is responsible for maintenance and repairs.
- The housing developer may be eligible for federal rehabilitation tax credits for renovation work to the historic buildings.
- Eglin, the State of Florida, and the U.S. Forest Service do not lose a historically significant complex.

Disadvantages of use by housing developer

- Funding for Eglin office leases must still come out of operations and maintenance.
- Eglin or the developer would be responsible to undertake and fund the archaeological mitigation work.

Proponents of use by housing developer

- Consulting Parties
- 96 CEG/CEHP

Estimated costs of use by housing developer

- Initial estimated construction cost is \$1,798,606. For detailed cost estimates, see Appendix A.
- Total estimated cost for long-term O&M for the next 50 years is \$19,451,375. For details on how this cost was calculated, see Appendix B.

Funding sources

- Housing developer

Compatibility with housing privatization initiative

- Housing developer is required to locate a housing office within the family housing area. Current RFP would need to be modified to accommodate this use.
- Housing office is a compatible land use with family housing.

Maintain as Existing GOQ, SOQ, and JNCOQ

The housing developer would maintain all the buildings in the Camp Pinchot Historic District in their current condition and with their current occupant ranks. Rehabilitation work would be limited to repairing existing systems. This option also assumes no site utility upgrades beyond relocation of the overhead electric line in order to avoid expensive archaeological mitigation.

The feasibility of this use depends on the likelihood of the developer to see a good return on investment. Minimally, the total cost of a rehabilitation project includes the cost of the actual project, plus the cost of a short-term/low-interest loan, plus the cost of minimal maintenance, plus a reasonable profit.

Table 9 Work required to maintain as existing GOQ, SOQ, and JNCOQ

• Buildings 1551, 1552, 1553, 1555, 1561, 1562, 1564, and 1565	No work.
• Buildings 1556, 1557, 1558, and 1559	Renovate as existing GOQ, SOQs, and JNCOQ
• All renovation work on the houses includes/assumes the following: <ul style="list-style-type: none">○ New asphalt shingle roof.○ Replacement of 50% of exterior walls and siding.○ New double-hung metal windows with simulated 6/6 lights.○ New metal exterior doors.○ Insulation added to exterior walls.	
• Overall site utility work consists of the following: <ul style="list-style-type: none">○ Storm, sanitary, and potable water to remain as is.○ Overhead electric to be relocated to along access drive from the highway and tie into existing utility poles.	
• Site work	No work.
• Archaeological mitigation	No work.

Advantages of maintaining as existing GOQ, SOQ, and JNCOQ

- Land remains under Air Force control and no additional AT/FP measures need to be undertaken.
- The Camp Pinchot Historic District remains intact.
- Housing developer is responsible for maintenance and repairs.
- Lease agreement terms ensure preservation of the facilities and alterations in conformance with the Secretary of the Interior's Standards for Rehabilitation.
- Eglin, the State of Florida, and the U.S. Forest Service do not lose a historically significant complex.

Disadvantages of maintaining as existing GOQ, SOQ, and JNCOQ

- Some buildings may not see the appropriate level of repairs due to BAH income restrictions.
- Some officers will be living in housing that is technically "substandard" and Eglin will not meet its goals of standardization of *all* housing units.

Proponents of maintaining as existing GOQ, SOQ, and JNCOQ

- Consulting Parties

Estimated costs of maintaining as existing GOQ, SOQ, and JNCOQ

- Estimated initial construction cost is \$443,430. For detailed cost estimates, see Appendix A.
- Total estimated long-term O&M cost for the next 50 years is \$21,603,007. See Appendix B for how this cost was determined.

Funding sources

- Housing developer

Compatibility with housing privatization initiative

- Housing developer is required to develop a specific number of housing types for various grades. These units would assist in meeting those requirements. Housing RFP would need to be modified to accommodate this use.
- Renovated family housing units would be compatible with new family housing units.

Renovate into GOQ, SOQs, and JNCOQ

Under this option, the four existing historic houses would be renovated to current Air Force housing standards in terms of amenities, square footage, and energy efficiency. Building 1559 would be renovated into a four-bedroom GOQ, while Building 1556 and 1557 would be renovated into four-bedroom SOQs. Building 1558 would be renovated into a two-bedroom JNCOQ appropriate for a member of Eglin's security forces. All site utilities are upgraded to connect with new systems installed in the adjacent housing area.

Table 10 Work required to renovate into GOQ, SOQs, and JNCOQ

<ul style="list-style-type: none">• Buildings 1551, 1552, 1553, 1555, 1561, 1562, and 1564	No work.
<ul style="list-style-type: none">• Building 1565	Demolish.
<ul style="list-style-type: none">• Buildings 1556, 1557, 1558, and 1559	Renovate to meet current housing standards for GOQ, SOQs, and JNCOQ.
<ul style="list-style-type: none">• All renovation work on the houses includes/assumes the following:<ul style="list-style-type: none">○ New asphalt shingle roof.○ Replacement of 50% of exterior walls and siding.○ New double-hung metal windows with simulated 6/6 lights.○ New metal exterior doors.○ Insulation added to exterior walls.○ Interior configuration and additions as needed to meet square footage and program requirements.	

<ul style="list-style-type: none"> Overall site utility work consists of the following: <ul style="list-style-type: none"> New storm, sanitary, and potable water lines feeding from existing systems along the highway. Existing septic tanks left in place and filled with concrete. New buried electric lines that connect to a meter located in the new housing area. 	
<ul style="list-style-type: none"> Site work 	No work.
<ul style="list-style-type: none"> Archaeological mitigation 	Data recovery needed at all areas of ground disturbing activities, such as trenches and excavation for new utility lines. Data recovery must be completed prior to any ground disturbing activities. Eglin or the developer could be responsible for data recovery.

Advantages of renovating into GOQ, SOQs, and JNCOQ

- Housing privatization developer expends funds to rehabilitate the houses and is responsible for ongoing maintenance.
- Lease agreement terms ensure preservation of the facilities and alterations in conformance with the Secretary of the Interior's Standards for Rehabilitation.
- Eglin, the State of Florida, and the U.S. Forest Service do not lose a historically significant complex.

Disadvantages of renovating into GOQ, SOQs, and JNCOQ

- Housing privatization developer must expend significant funds to rehabilitate the property and may not be able to see a return on investment due to rental restrictions. As a result, the developer may not be willing to accept the property.
- Eglin or the developer would be responsible for archaeological mitigation work.

Proponents of renovating into GOQ, SOQs, and JNCOQ

- Consulting Parties

Estimated costs of renovating into GOQ, SOQs, and JNCOQ

- Estimated construction cost is \$1,924,229. For detailed cost estimates, see Appendix A.
- Total estimated ongoing O&M costs for the next 50 years is \$19,425,110. For details on how this cost was calculated, see Appendix B.

Funding sources

- Housing developer

Compatibility with housing privatization initiative

- Housing developer is required to develop a specific number of housing types for various grades. These units would assist in meeting those requirements. The current privatization RFP would need to be modified to accommodate this use.
- Renovated family housing units would be compatible with new family housing units.

Renovate into JNCOQs

This option involves less extensive renovation of the existing houses for use by other than General or Senior Officers. The proposed GOQ and SOQs would be constructed new at another location, such as Girl Scout Point.

The feasibility of this option is similar to the GOQ and SOQ option above. The extent of renovation will be less, as will the projected BAH income. Although the developer is allowed to rent homes to the general public, the circumstances generally require that the buildings first be unoccupied. In this option, as in the ones above, it is assumed that demand will be high and military members will be found to rent these facilities.

Table 11 Work required to renovate into JNCOQs

• Buildings 1551, 1552, 1553, 1555, 1561, 1562, and 1564	No work.
• Building 1565	Demolish.
• Buildings 1556, 1557, 1558, and 1559	Renovate to meet current housing standards for JNCOQs.
• All renovation work on the houses includes/assumes the following: <ul style="list-style-type: none">○ New asphalt shingle roof.○ Replacement of 50% of exterior walls and siding.○ New double-hung metal windows with simulated 6/6 lights.○ New metal exterior doors.○ Insulation added to exterior walls.	
• Overall site utility work consists of the following: <ul style="list-style-type: none">○ New storm, sanitary, and potable water lines feeding from existing systems along the highway.○ Existing septic tanks left in place and filled with concrete.○ New buried electric lines that connect to a meter located in the new housing area.	
• Site work	No work.
• Archaeological mitigation	Data recovery needed at all areas of ground disturbing activities, such as trenches and excavation for new utility lines. Data recovery must be completed prior to any ground disturbing activities. Eglin or the developer could be responsible for data recovery.

Advantages of renovating into JNCOQs

- Housing privatization developer expends funds to rehabilitate the houses and is responsible for ongoing maintenance.
- Lease agreement terms ensure preservation of the facilities and alterations in conformance with the Secretary of the Interior's Standards for Rehabilitation.
- Eglin, the State of Florida, and the U.S. Forest Service do not lose a historically significant complex.

Disadvantages of renovating into JNCOQs

- Housing privatization developer must expend significant funds to rehabilitate the property and may not be able to see a return on investment due to rental restrictions. As a result, the developer may not be willing to accept the property.
- Eglin or the developer would be responsible for archaeological mitigation work.

Proponent of renovating into JNCOQs

- Consulting Parties

Estimated costs of renovating into JNCOQs

- Estimated construction cost is \$1,678,388. For detailed cost estimates, see Appendix A.
- Total estimated long-term O&M cost for the next 50 years is \$19,425,110. For details on how this cost was calculated, see Appendix B.

Funding sources

- Housing developer

Compatibility with housing privatization initiative

- Housing developer is required to develop a specific number of housing types for various grades. These units would assist in meeting those requirements. Current privatization RFP would need to be modified.
- Renovated family housing units would be compatible with new family housing units.

Demolition of Buildings and Construction of New GOQ/SOQs

This option, included in the Housing Privatization RFP, is the preferred alternative. The project involves the demolition of all buildings on the site, with the exception of Building 1561 (the Boathouse), and the construction of one GOQ and two SOQs.

As with all options involving ground-disturbing activities, Eglin or the developer would first have to conduct archaeological data recovery before starting any ground-disturbing activities, whether these activities were conducted by Eglin or by the developer; mitigation activities would need to occur prior to the demolition of the buildings. The responsibility to undertake and fund

this effort would fall on either Eglin or the housing privatization developer. In addition, the Florida State Historic Preservation Officer (SHPO) may propose other forms of documentation to mitigate the loss of the buildings (public brochures, video, and so on).

Table 12 Work required to demolish existing buildings and construct new GOQ/SOQs

• Building 1564	No work.
• Buildings 1551, 1552, 1553, 1555, 1556, 1557, 1558, 1559, 1561, 1562, and 1565	Demolish.
<ul style="list-style-type: none"> Overall site utility work consists of the following: <ul style="list-style-type: none"> New storm, sanitary, and potable water lines feeding from existing systems along the highway. Existing septic tanks left in place and filled with concrete. New buried electric lines that connect to a meter located in the new housing area. 	
• Archaeological mitigation	Data recovery needed for the entire historic district. Data recovery must be completed prior to any ground disturbing activities. Eglin or the developer could be responsible to undertake and fund data recovery. Additional mitigation documents may be requested by the Florida SHPO during negotiation of the MOA.
• Historic building mitigation	Historic American Building Survey (HABS) documentation has been undertaken for the facility and could qualify as building mitigation. However, the SHPO may also propose other forms of documentation.

Advantages of demolishing existing buildings and constructing new GOQ/SOQs

- Eglin can move forward with their preferred housing privatization alternative.
- All Eglin housing units are standardized and meet current housing standards.
- Housing developer does not have to expend funds to renovate historic properties in conformance with the Secretary of the Interior's Standards for Rehabilitation.

Disadvantages of demolishing existing buildings and constructing new GOQ/SOQs

- Eglin, the State of Florida, and the U.S. Forest Service lose a historically significant complex.
- Eglin or the developer must be responsible for the undertaking and funding of archaeological mitigation.

Proponents of demolishing existing buildings and constructing new GOQ/SOQs

- 96 CEG

Estimated costs of demolishing existing buildings and constructing new GOQ/SOQs

- Estimated cost is \$3,392,556. For detailed cost estimates, see Appendix A.
- Total estimated O&M cost for the next 50 years is \$18,015,616. For details on how this cost was calculated, see Appendix B.

Funding sources

- Housing developer

Compatibility with housing privatization initiative

This alternative is the preferred one in the housing privatization plan.

Housing Development Costs and Payback

The following tables compare the calculated costs of the various housing options of maintaining current configuration, renovation into GOQs and SOQs, renovation into JNCOQ, and demolition/build new. Minimally, the cost of the option includes the actual work, plus the cost of a short-term/low interest loan, plus the cost of minimal maintenance, plus a reasonable profit. Dividing this total cost by the amount of the annual BAH results in the number of years the property owner can wait before seeing a return on investment. The total term of the privatization project is 50 years; for the purposes of this study, any return within 30 years (a standard residential mortgage) is considered reasonable. As an example, Table 13 shows the return on investment for the renovation of Building 1556 to meet SOQ requirements:

Table 13 Reasonability of renovating Building 1556 to meet SOQ requirements

Cost to Renovate Unit x Cost of Short-Term Low Interest Loan = Loan Amount $\$443,479 \times 1.03 = \$456,783$
Loan Amount + Minimum Annual Maintenance Cost + Annual Utility Cost = Unit Cost $\$456,783 + (2,483 \text{ sq ft} \times \$1.25/\text{sq ft}) + \$1,800 = \$461,697$
Unit Cost x 10% profit = Total Rehabilitation Cost $\$461,697 \times 1.10 = \$508,087$
BAH (O6) x 12 months = Annual Rental Income $\$1,485 \times 12 = \$17,820$
Total Rehabilitation Cost / Annual Rental Income = Years before a return on investment $\$508,087 / \$17,820 = 28.51 \text{ years}$

Table 14 and Table 15 illustrate costs and returns to both include and exclude archaeological mitigation work.

Table 14 Cost comparison, including archaeological work

(YTR = Years to return)

	Maintain Current Configuration	Renovate as GOQ/SOQ	Renovate as JNCOQ/E9	Demo/ Build New
Building 1556	\$ 141,959.35 9.32 YTR	\$ 443,479.13 28.49 YTR	\$ 367,869.53 32.83 YTR	\$ 527,915.32 33.85 YTR
Building 1557	\$ 100,095.14 9.13 YTR	\$ 362,283.25 32.24 YTR	\$ 305,860.95 27.27 YTR	\$ 331,669.02 29.56 YTR
Building 1558	\$ 104,919.32 6.98 YTR	\$ 398,900.29 25.67 YTR	\$ 369,416.45 33.00 YTR	\$ 527,915.32 33.85 YTR
Building 1559	\$ 96,456.50 6.41 YTR	\$ 576,824.53 36.61 YTR	\$ 503,042.97 38.75 YTR	\$ 711,164.90 45.07 YTR

Table 15 Cost comparison, excluding archaeological work

(YTR = Years to return)

	Maintain Current Configuration	Renovate as GOQ/SOQ	Renovate as JNCOQ/E9	Demo/ Build New
Building 1556	\$ 141,959.35 9.32 YTR	\$ 312,639.25 20.17 YTR	\$ 263,197.63 23.61 YTR	\$ 402,190.66 25.86 YTR
Building 1557	\$ 100,095.14 9.13 YTR	\$ 272,935.82 24.37 YTR	\$ 234,383.00 20.97 YTR	\$ 250,347.12 29.56 YTR
Building 1558	\$ 104,919.32 6.98 YTR	\$ 249,788.51 16.19 YTR	\$ 250,127.02 22.48 YTR	\$ 402,190.66 25.86 YTR
Building 1559	\$ 96,456.50 6.41 YTR	\$ 408,842.66 26.05 YTR	\$ 368,657.47 28.51 YTR	\$ 546,525.46 34.72 YTR

Generally, the most economically reasonable option is to rehabilitate the houses in their current configuration and continue to lease them to their current grade of tenants. Next is the option to rehabilitate the houses for the grade that best fits the current size/configuration. A more expensive alternative is to rehabilitate the houses to fit the current standards for general and senior officers quarters. The most expensive option is to demolish and construct new housing, even if archaeology is taken out of the calculations. The increased cost is due to the cost of demolition as well as to the cost of constructing a home that meets the standards for general officers.

Air Force Leasing Options

The following options were considered where the Air Force would retain ownership of the land but lease some or all of the land and buildings to another entity.

Partnership with State and Federal Agencies for an Interpretive Center

Eglin's Cultural and Natural Resources Divisions have expressed an interest in using the site as a good fit for their respective missions. However, they also recognize that their use of the site still requires an infusion of funds for renovation and ongoing maintenance by 96 CEG. A partnership with other state and federal agencies with similar missions could offset the costs of both. Possible agencies to approach include the U.S. Forest Service and/or the Florida Department of Natural Resources. Adaptive reuse options that could be shared by all parties include offices, an interpretive center for natural and cultural resources, and archaeological curation facilities.

Table 16 Work required for a partnership with state and federal agencies

• Buildings 1552, 1553, and 1561	No work.
• Building 1565	Demolish.
• Buildings 1551, 1552, and 1555	Adaptive reuse into curation facilities that meet 36FCR79 requirements.
• Building 1559	Adaptive reuse into an interpretive center.
• Buildings 1556, 1557, 1558, and 1564	Adaptive reuse into offices.
• All renovation work on the garage/storage buildings assumes the following: <ul style="list-style-type: none">○ New asphalt shingle roof.○ New insulated double-hung metal windows with simulated 6/6 lights, also with protective coating against ultraviolet light.○ Existing sliding doors retained and commercial storefront entry system installed.○ Newer garage doors replaced with commercial storefront entry system.○ Insulation added to exterior walls, and gypsum wallboard finishes added to walls and ceilings.○ Structural reinforcement of Building 1555's floor to allow storage use of upper level.○ New HVAC system.○ New lighting systems with ultraviolet filters.	

<ul style="list-style-type: none"> • All renovation work on the houses includes/assumes the following: <ul style="list-style-type: none"> ○ New asphalt shingle roof. ○ Replacement of 50% of exterior walls and siding. ○ New double-hung metal windows with simulated 6/6 lights. ○ New metal exterior doors. ○ Insulation added to exterior walls. ○ Structural reinforcement of floors in Building 1559 for public assembly use. 	
<ul style="list-style-type: none"> • Overall site utility work consists of the following: <ul style="list-style-type: none"> ○ New storm, sanitary, and potable water lines feeding from existing systems along the highway. ○ Existing septic tanks left in place and filled with concrete. ○ New buried electric lines that connect to a meter located in the new housing area. 	
<ul style="list-style-type: none"> • Site work 	Demolish existing tennis court and construct parking lot on site.
<ul style="list-style-type: none"> • Archaeological mitigation 	Data recovery needed at all areas of ground disturbing activities, such as trenches and excavation for new utility lines. Data recovery must first be completed by Eglin prior to transfer to the housing developer.

Advantages of a partnership with state and federal agencies

- Eglin retains control of the land through clauses built into the lease.
- Another entity assists Eglin with maintenance and repair costs.
- Eglin creates much-needed curation space for existing and future collections, as required by federal regulations.
- The appropriate Eglin agencies directly oversee significant cultural and natural resources.
- The lease expires after a set amount of time, allowing Eglin to reconsider mission impacts.
- No construction of new additions.
- Eglin, the State of Florida, and the U.S. Forest Service do not lose a historically significant complex.

Disadvantages of a partnership with state and federal agencies

- Some renovation costs may still need to be funded through MILCON, and such costs are extremely unlikely to receive funding.
- 96 CEG continues to maintain some buildings/grounds.
- Eglin must still pay for archaeological mitigation work.
- Property may need to undergo an AT/FP study to determine security needs due to its location next to a family housing area.

Proponent of a partnership with state and federal agencies

- Consulting Parties

Estimated costs of a partnership with state and federal agencies

- Estimated cost is \$2,315,116. For detailed cost estimates, see Appendix A.
- Total estimated O&M cost for the next 50 years is \$19,573,002. For details on how this cost was calculated, see Appendix B.

Funding sources

- 96 CEG
- Other state and federal agencies

Compatibility with housing privatization initiative

- A partnership to develop an interpretive center is not in the housing privatization plan.
- An interpretive center, with limited public access, would be a compatible land use next to family housing.

Non-Profit Organizations

Eglin has previously leased a historic site to a non-profit organization, which then funded the restoration and maintenance. Eglin acquired the Cape San Blas lighthouse and two lighthouse keeper residences from the Coast Guard, along with land needed for Eglin's training missions. A non-profit organization approached Eglin about leasing the buildings with the intent to restore and operate the complex as a lighthouse museum.

Eglin advertised the competitive lease nationally, including advertisements placed in major city newspapers. Through a Legacy grant, Eglin was able to rehabilitate one of the houses. The winning non-profit agency was then able to secure a state preservation grant to rehabilitate the other. Since Legacy grants have been all but eliminated, Eglin would have to rely on the non-profit agency to secure all the necessary funds for rehabilitation.

Work required for non-profit organizations

- Eglin prepares and administers a nationwide competitive lease.
- Eglin negotiates lease terms and "maintenance manual" for historic buildings.

Advantages of non-profit organizations

- Eglin retains control of the land through clauses built into the lease.
- Another entity is responsible for maintenance and repair.
- The lease expires after a set amount of time, allowing Eglin to reconsider mission impacts.

- A non-profit organization is eligible to receive state and federal preservation grants not available to a federal agency.
- Eglin, the State of Florida, and the U.S. Forest Service do not lose a historically significant complex

Disadvantages of non-profit organizations

- Process could take several years to complete.
- Eglin may not be able to find an organization with the financial capability to restore and maintain the property.
- Use restrictions may be needed to maintain compatibility with family housing and general/senior officer housing.
- Base security measures will need to be installed along the boundary between Camp Pinchot and the new family housing area.

Proponents of non-profit organizations

- Consulting Parties

Estimated costs of non-profit organizations

Costs were not estimated because it is not known how the non-profit organization would use the facilities.

Funding sources

- Non-profit organization
- 96 CEG

Compatibility with housing privatization initiative

- A non-profit use of Camp Pinchot is not in the housing privatization plan.
- The non-profit use of Camp Pinchot could or could not be compatible with family housing areas. The type of non-profit would also determine if the land use was compatible.

Non-Air Force Options

The following options were considered in which the Air Force relinquishes all rights and responsibility of the land and buildings. The Encroachment Committee must first review these options, along with any real estate transfer, for legality and mission impact.

Land Swaps and Conservation Easements

In the past, Eglin has successfully swapped land with the U.S. Forest Service. A land swap avoids the requirement of declaring base land excess and using the General Services Administration (GSA) as the instrument of transfer. These can take some time, but a swap with the Forest Service should be fairly straightforward since Eglin has swapped land in the past, and almost all of Eglin's land originally came from the Forest Service.

Since the Camp Pinchot Historic District is so significant in Forest Service history, Mr. Tom McCulloch of the Advisory Council on Historic Preservation (ACHP) believes that the Forest Service would locate funds for preservation and maintenance. Ms. Rhonda Kimbrough of the Forest Service stated that the Forest Service would likely provide ongoing maintenance funds by converting the property into a recreational facility that the general public could rent. Also, Eglin once transferred Fred Gannon State Park to the Forest Service, which then sold a large portion of it to a private entity. It may be necessary to bundle the Camp Pinchot Historic District with another desirable piece of Eglin land in order to complete a swap with the Forest Service. The Forest Service may require this additional land to sell so that the proceeds could be used to fund the preservation of Camp Pinchot. A similar transfer/sale could take place between Eglin and the State of Florida, but it would be a more cumbersome process.

Eglin also places high priority on the acquisition of conservation easements around the perimeter of the base, especially the east side. These easements prevent private development from encroaching on the base's buffer zones. For management purposes, Eglin prefers that another entity acquire and manage the easements. In the past, the base has partnered with the Nature Conservancy and the State of Florida, where the base provided the funds but the partner entity acquired the easements.

A very reasonable solution would be to bundle Camp Pinchot with other desirable land and swap it with the Forest Service or local government. The Forest Service or local government would then be able to sell the other land for cash to purchase conservation easements on behalf of Eglin, along with ongoing preservation of Camp Pinchot. Bundling with another piece of land may also be necessary for the swap if the local government is the State of Florida, since historically the state does not accept land with restrictive covenants. However, the state may accept Camp Pinchot and its preservation covenants if they can also make use of another parcel whose title is free and clear. For example, the City of Valparaiso has been eager to see "Segment G" (a tract of land Eglin acquired in the 1950s but never used for housing) developed for tax revenue purposes. Eglin also has property elsewhere that may be of interest to the Forest Service.

Concerns about this option include whether the final receiving agency would make preservation of Camp Pinchot a priority, whether some receiving agencies would be willing to take property with deed restrictions, and the drawn out time frame required in order to negotiate agreeable terms with multiple parties.

Work required for land swaps and conservation easements

- Eglin Encroachment Committee must first approve the land swap, whether it is Camp Pinchot alone or Camp Pinchot bundled with other property.
- Eglin coordinates with the U.S. Forest Service and/or state/local agencies to affect an agreeable exchange of the land for the purchase of conservation easements.

Advantages of land swaps and conservation easements

- Eglin, the State of Florida, and the U.S. Forest Service do not lose a historically significant complex.
- If Camp Pinchot is transferred to another federal agency that must abide by federal preservation laws, then there is no requirement to include protective covenants in the deed or complete mitigation work prior to the transfer.
- Eglin obtains highly desirable conservation easements that provide a buffer zone around the perimeter of the base.

Disadvantages of land swaps and conservation easements

- Eglin's Encroachment Committee may decide that the land must remain under base control for mission purposes.
- The U.S. Forest Service does *not* like to manage conservation easements that are not directly associated with existing national forests. This option most likely will have to include additional parties beside the U.S. Forest Service.
- The State of Florida prefers *not* to take property with deed restrictions, such as covenants for historic buildings and/or archaeological sites.
- If the transfer could only be accomplished by packaging Camp Pinchot with other land, the receiving agency may not put a high priority on the protection of the historic district.
- Base security measures will need to be installed along the boundary between Camp Pinchot and the new family housing area.

Proponents of land swaps and conservation easements

- 46 TW/CAX
- Consulting Parties

Estimated costs of land swaps and conservation easements

Costs were not estimated because the value of Camp Pinchot and conservation easements were not known.

Funding sources

- Other state or federal agencies

Compatibility with housing privatization initiative

- A land swap is not in the housing privatization plan.
- If the U.S. Forest Service became the owner of Camp Pinchot and turned the facility into a recreational center, it would be a compatible land use next to family housing.

Transfer to the U.S. Forest Service

The documents that conveyed land from the U.S. Forest Service to Eglin in the 1940s (including Camp Pinchot) stipulated that if the property were no longer required for military use, the property “may” be transferred back to the U.S. Forest Service. Eglin’s Encroachment Committee must first approve the proposed real estate transition as legal with no mission impacts. If the land is part of a one-way transfer, typically the land must first be excessed, with the transfer managed by the GSA. Since the Camp Pinchot property originated with the Forest Service, a one-way transfer back to the Forest Service may not require the involvement of the GSA. Some other federal agencies may also have real estate provisions that allow transfers outside of the GSA. If the GSA manages the transfer, they would utilize a hierarchy method to identify potential “owners” of the property, starting with DoD agencies, other federal agencies, state agencies, local governments, non-profit organizations and finally, private developers/owners. This process, however, can be very complicated and take several years to complete.

According to Ms. Rhonda Kimbrough of the U.S. Forest Service, the transfer of Camp Pinchot to the Forest Service is not the Forest Service’s preferred option, as their current land management plan is not set up to acquire land that is not contiguous with existing forest service land. The management plan would have to be amended to accept Camp Pinchot. However, if no other option exists for Camp Pinchot, the Forest Service would amend their land management plan to accept it.

If Camp Pinchot were transferred to the Forest Service, they would most likely convert it into a recreational facility operated by a concessions company. The Forest Service would conduct a nationwide advertisement, and the prospective concession companies would submit ideas for the site’s use. The Forest Service would then select the “highest and best” use and meet with the public to discuss the proposed recreational use and to incorporate any concerns.

Work required to transfer property to the U.S. Forest Service

- Eglin Encroachment Committee approves the excessing of the property.
- Eglin coordinates with GSA to transfer the property, including covenants for ongoing preservation.
- GSA finds new owners of the property through their process.

Advantages of transferring property to the U.S. Forest Service

- Eglin, the State of Florida, and the U.S. Forest Service do not lose a historically significant complex
- Transfer to the U.S. Forest Service, an agency that must abide by federal preservation laws, does not require the inclusion of protective covenants in the deed or completion of mitigation work prior to the transfer.

Disadvantages of transferring property to the U.S. Forest Service

- Process could take several years to complete via GSA.
- Base security measures will need to be installed along the boundary between Camp Pinchot and the new family housing area.
- The new family housing area will likely still end up adjacent to a recreational facility, only one not under direct Eglin control. Complaints may not be addressed as quickly.

Proponents of transferring property to the U.S. Forest Service

- 46 TW/CAX
- Consulting Parties

Estimated costs of transferring property to the U.S. Forest Service

Costs were not estimated because the land would only be transferred and no financial agreement would be associated with the transfer.

Funding Sources

- U.S. Forest Service

Compatibility with housing privatization initiative

- Transfer of the property to the U.S. Forest Service is not in the housing privatization plan.
- If the U.S. Forest Service became the owner of Camp Pinchot and turned the facility into a recreational center, it would be a compatible land use next to family housing.

This page intentionally left blank.

Chapter 4

Camp Pinchot

Building Assessments

Building 1551 – Garage



Figure 4 Looking west at Building 1551.

Building History

The original construction date on Building 1551 is not clear. The facility was not located on original mapping from 1914, although it may have been constructed in the 1920s and moved to its current location by 1935, when it appears on an aerial photograph. The facility also appears on a 1938 USGS map. It was used as a garage for one of the general's cars in the 1950s and 1960s. Currently, the building is used as storage space for the general's parties and guests.

The four-bay, one-story structure with a side-gabled roof is located just to the west of the main drive and entrance into Camp Pinchot. Three modern garage doors have replaced historic sliding doors on the south façade. The yellow pine horizontal wood lap siding is consistent with other facilities at Camp Pinchot. The facility has a single wood window and attic vent on both the east and west facades.

Historical and Architectural Significance of Building

Building 1551 is one of ten contributing buildings within the Camp Pinchot Historic District. The significance of Building 1551 and Camp Pinchot lies in their association with the establishment and management of the Choctawhatchee National Forest (CNF). The CNF was one of the original eleven national forests created by President Theodore Roosevelt and was the only forest in the southeastern United States.

Building 1551 is one of the original ancillary buildings constructed by the Forest Service at Camp Pinchot. The facility was not shown on the original 1914 Camp Pinchot map but was constructed prior to 1935 and remained associated with the Forest Service. Building 1551 has served as both a garage and storage space since the Air Force obtained the property in 1940.

Existing Conditions

Building 1551 is in good condition. The following conditions were observed during a field visit:

- Shingled gabled roof without a cornice system
- Horizontal wood lap siding in good condition
- Replacement wood panel overhead doors on south façade
- Single-glazed four-light painted wood windows on south and north facades
- Concrete slab-on-grade foundation in good condition

Previous Operation and Maintenance Costs

Table 17 O&M expenditures for Building 1551

Fiscal Year	Expended Funds
2003	\$ 853
2004	\$ 845
2005	\$ 222

Building Occupants and Plans

Building 1551 is currently used as storage space for Building 1559. There are no offices within the facility. The facility is part of the current Eglin housing privatization plan, with the preferred alternative being demolition. The preferred alternative does not specify the need for or location of a future maintenance building.

Assessment of Use Capacity

Building 1551 contains approximately 800 gross square feet of storage space. The open floor plan of the facility allows for storage of materials of varying sizes. The three garage bays provide easy access to the interior of the facility.

Reasonable Alternatives

Under Air Force occupancy, a practical alternative is for the building to remain as storage to support a base recreational complex, or to be converted into a small one-bedroom or efficiency recreational cottage. With the housing privatization option, a reasonable alternative is to continue as a light maintenance/storage facility. Under the Air Force leasing option, a practical use includes conversion into a curation facility in partnership with state or federal agencies. If the Air Force decides to excess the property, a logical alternative is to swap the property in exchange for conservation easements.

Cost Estimates

The following tables show summaries for the various alternatives associated with Building 1551. Detailed breakdowns of each estimate can be found in Appendix A.

Option 1 – Base Recreational Facility

Construction Division	Cost Totals
Building Improvements	\$ 59,607.75
General Conditions	\$ 8,941.16
Escalation	\$ 1,490.19
Contingency	\$ 5,960.78
Contract Administration	\$ 6,079.99
Planning/Design	\$ 7,599.99
Utilities (% of whole)	\$ 2,088.18
TOTAL	\$ 91,768.04
<hr/>	
O & M estimate for 50 years	\$ 985,882.36

Option 2 – Housing Developer Use as Offices

No work is planned for Building 1551 under this option. Estimated O&M cost for Building 1551 for the next 50 years is \$1,004,049.

Option 3 – Interpretive Center Partnership

	Cost Totals
Building Improvements	\$ 58,548.50
General Conditions	\$ 8,782.28
Escalation	\$ 1,463.71
Contingency	\$ 5,854.85
Contract Administration	\$ 5,971.95
Planning/Design	\$ 7,464.93
Utilities (% of whole)	\$ 5,584.36
Archaeology Mitigation (% of whole)	\$ 32,251.45
HABS Documentation (% of whole)	\$ 5,269.49
Site Improvements (% of whole)	\$ 3,236.19
TOTAL	\$ 134,427.71
<hr/>	
O & M estimate for 50 years	\$ 1,048,438.30

Option 4 – Renovation into GOQs, SOQs, and JNCOQs

No work is planned for Building 1551 under this option. Over the next 50 years, it is estimated O&M costs will total \$1,058,977.

Option 5 – Renovation into JNCOQs

No work is planned for Building 1551 under this option. Estimated O&M costs for Building 1551 for the next 50 years total \$1,004,049.

Option 6 – Maintain Existing Quarters

No work is planned for Building 1551 under this option. It is estimated that over the next 50 years, Building 1551 O&M costs will total \$985,882.

Option 7 – Mothballing

Construction Division	Cost Totals
Mothballing	\$ 6,875.00
General Conditions	\$ 1,031.25
Escalation	\$ 171.88
Contingency	\$ 687.50
Contract Administration	\$ 701.25
Planning/Design	\$ 876.56
HABS Documentation (% of whole)	\$ 4,410.58
TOTAL	\$ 14,754.02
<hr/>	
O & M estimate for 10 years	\$ 21,445.75

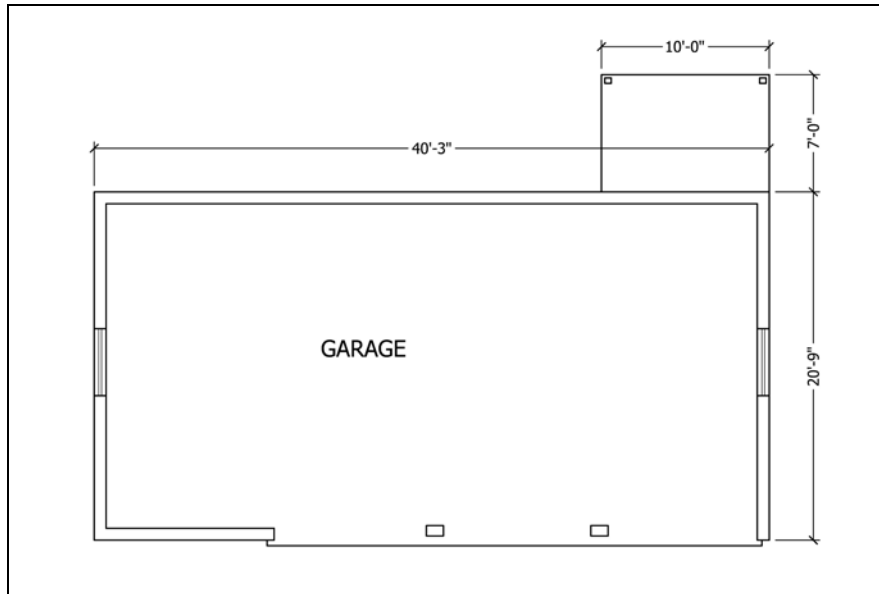
Option 8 - Demolition and New Construction

Construction Division	Cost Totals
Demolition	\$ 12,276.00
General Conditions	\$ 1,841.40
Escalation	\$ 306.90
Contingency	\$ 1,227.60
Contract Administration	\$ 1,252.15
Planning/Design	\$ 1,565.19
Utilities (% of whole)	\$ 18,621.38
Archaeology Mitigation (% of whole)	\$ 80,829.02
HABS Documentation (% of whole)	\$ 4,410.58
Site Improvements (% of whole)	\$ 6,432.37
Cost of New GOQ & 2 SOQs (% of whole)	\$ 69,227.82
TOTAL	\$ 128,762.59
O&M estimate for 50 years (% of whole)	DEMOLISHED

Option 9 - Demolition with Land Converted to a Park

Construction Division	Cost Totals
Demolition	\$ 12,276.00
General Conditions	\$ 1,841.40
Escalation	\$ 306.90
Contingency	\$ 1,227.60
Contract Administration	\$ 1,252.15
Planning/Design	\$ 1,565.19
Archaeology Mitigation (% of whole)	\$ 34,211.96
HABS Documentation (% of whole)	\$ 3,163.51
Site Improvements (% of whole)	\$ 28.92
TOTAL	\$ 55,873.63
O&M estimate for 50 years (% of whole)	DEMOLISHED

Floor Plan



Building 1552 – Maintenance Shed



Figure 5 Looking west at Building 1552.

Building History

Building 1552 appears on maps of Camp Pinchot as early as 1914. Building 1552 appeared to be located behind the supervisor's quarters in 1914 and was labeled as "stables." The facility was moved to its current location by 1935. It is believed that the building had corrals and pens surrounding the facility, but they were subsequently removed. The yellow pine, timber-frame building rests on a concrete foundation. The exterior cladding consists of horizontal pine boards.

Building 1552's interior includes a hayloft that is accessible from the eastern half of the first floor. During the 1970s, the eastern room housed mechanical items and was used as a gym. The tool shop occupied the western half of the facility. The interior has remained relatively unchanged. The interior walls remain exposed and the original unfinished pine plank floor also remains. The hayloft has been converted to storage space for Camp Pinchot residents.

Historical and Architectural Significance of Building

Building 1552 is one of ten contributing buildings within the Camp Pinchot Historic District. The significance of Building 1552 and Camp Pinchot lies in their association with the establishment and management of the Choctawhatchee National Forest (CNF). The CNF was one of the original eleven national forests created by President Theodore Roosevelt and was the only forest in the southeastern United States.

Building 1552 is one of the original ancillary buildings constructed by the Forest Service at Camp Pinchot. The facility was referred to as a barn and stable building on a 1914 map. The property was moved to its current location prior to 1935. Building 1552 has served as a maintenance shop since the Air Force obtained the property in 1940.

Existing Conditions

The maintenance shed has balloon-frame, exterior-bearing walls with interior post girder at the long axis of the structure. The facility remains in good structural condition. Observed conditions include:

- Gabled roof with asphalt shingles and no perimeter gutters
- Wood stairs to hayloft that do not meet code
- Painted exposed rafters at roof eaves; no cornice system
- Southern pine wood lap siding in fair to good condition
- Concrete slab-on-grade foundation in good condition
- Original pulley system intact in hayloft
- Two original sliding wood garage doors, painted, with overhead roller mechanisms
- Multi-light single-pane wood windows, painted
- No restroom facilities
- Entrance and egress non-accessible (ADA-ADAAG)
- Hayloft used as storage for Buildings 1556, 1557, and 1558

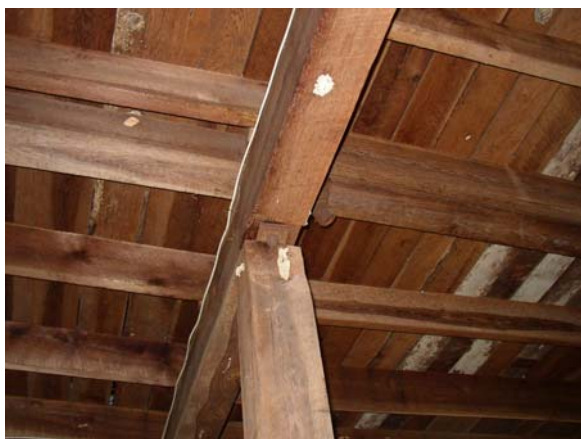


Figure 6 Structural framing.



Figure 7 Hayloft.

Previous Operation and Maintenance Costs

Table 18 O&M expenditures for Building 1552

Fiscal Year	Expended Funds
2003	\$ 826
2004	\$ 718
2005	\$ 185

Building Occupants and Plans

Building 1552 is currently used as a maintenance shop and office. The facility is used by personnel who maintain the grounds around Camp Pinchot. The facility is part of the current Eglin housing privatization plan, with the preferred alternative being demolition. The preferred alternative does not specify the need or location of a future maintenance building.

Assessment of Use Capacity

Building 1552 has nearly 2,070 gross square feet of storage space on the main floor. The hayloft contains another significant amount of storage space. The exact square footage is unknown. There are no Air Force size standards for grounds maintenance facilities in the Housing Privatization plan. The first floor is easily accessible for maintenance equipment.

Reasonable Alternatives

Under Air Force occupancy, a reasonable alternative is for the building to remain as storage to support a base recreational complex, or to be converted into a single large recreational cottage or a series of smaller units. With the housing privatization option, a practical use is to continue as a light maintenance/storage facility. Under the Air Force leasing option, a viable use includes conversion into a curation facility in partnership with state or federal agencies. If the Air Force decides to excess the property, a reasonable alternative is to swap the property in exchange for conservation easements.

Cost Estimates

The following tables show summaries for the various alternatives associated with Building 1552. Detailed breakdowns of each estimate can be found in Appendix A.

Option 1 – Base Recreational Facility

No work is planned on Building 1552 under this option. Long-term O&M costs for 50 years total \$2,550,971.

Option 2 – Housing Developer Use as Offices

No work is planned for Building 1552 under this option. Estimated Building 1552 O&M costs for 50 years total \$2,597,976.

Option 3 – Interpretive Center Partnership

No work is planned for Building 1552 under this option. Estimated Building 1552 O&M costs for 50 years total \$2,597,976.

Option 4 – Renovation into GOQs, SOQs, and JNCOQs

No work is planned for Building 1552 under this option. Estimated Building 1552 O&M costs for 50 years total \$2,597,976.

Option 5 – Renovation into JNCOQs

No work is planned for Building 1552 under this option. Estimated Building 1552 O&M costs for 50 years total \$2,597,976.

Option 6 – Maintain Existing Quarters

No work is planned for Building 1552 under this option. Under this option, the long-term cost for ongoing O&M at Building 1552 is \$2,550,971.

Option 7 – Mothballing

Construction Division	Cost Totals
Mothballing	\$ 8,815.00
General Conditions	\$ 1,322.25
Escalation	\$ 220.38
Contingency	\$ 881.50
Contract Administration	\$ 899.13
Planning/Design	\$ 1,123.91
HABS Documentation (% of whole)	\$ 11,412.37
TOTAL	\$ 24,674.54
O & M estimate for 10 years	\$ 55,490.87

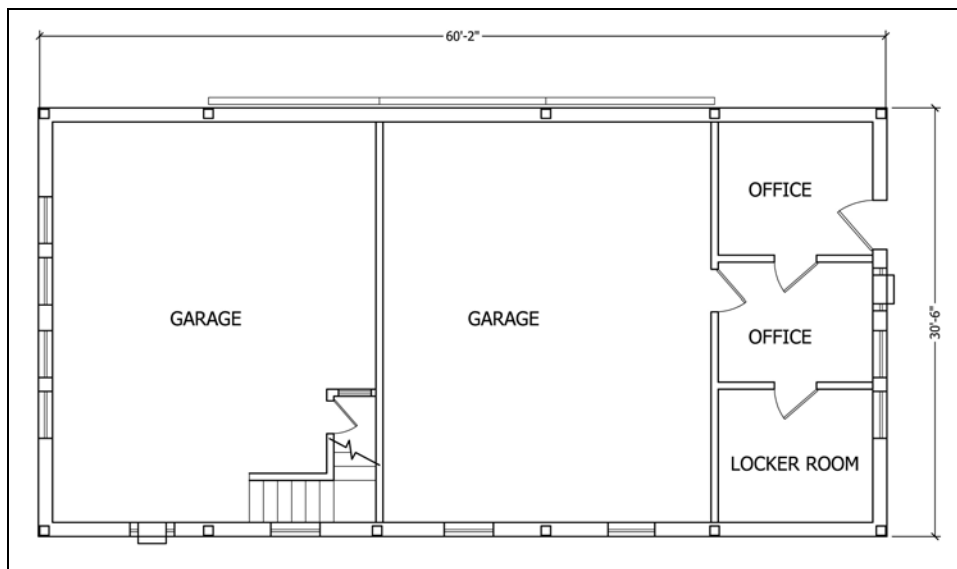
Option 8 – Demolition and New Construction

Construction Division	Cost Totals
Demolition	\$ 15,643.20
General Conditions	\$ 2,346.48
Escalation	\$ 391.08
Contingency	\$ 1,564.32
Contract Administration	\$ 1,595.61
Planning/Design	\$ 1,994.51
Utilities (% of whole)	\$ 48,182.83
Archaeology Mitigation (% of whole)	\$ 209,145.09
HABS Documentation (% of whole)	\$ 11,412.37
Site Improvements (% of whole)	\$ 16,643.76
Cost of New GOQ & 2 SOQs (% of whole)	\$ 179,126.99
TOTAL	\$ 308,919.24
O&M estimate for 50 years (% of whole)	DEMOLISHED

Option 9 – Demolition with Land Converted to a Park

Construction Division	Cost Totals
Demolition	\$ 15,643.20
General Conditions	\$ 2,346.48
Escalation	\$ 391.08
Contingency	\$ 1,564.32
Contract Administration	\$ 1,595.61
Planning/Design	\$ 1,994.51
Archaeology Mitigation (% of whole)	\$ 75,926.82
HABS Documentation (% of whole)	\$ 7,020.79
Site Improvements (% of whole)	\$ 64.18
TOTAL	\$ 106,546.99
O&M estimate for 50 years (% of whole)	DEMOLISHED

Floor Plan



Building 1553 – Maintenance Supervisor’s Office



Figure 8 Looking west at Building 1553.

Building History

Building 1553 serves as the catering kitchen for gatherings at Camp Pinchot. The facility does not show up on the original 1914 map, but it does appear on the 1935 aerial photograph and 1938 USGS map. It is believed that the structure was built in the early 1930s.

The single-story wood-frame structure sits near the pump house and tennis courts. The foundation is a concrete slab on grade. The facility has a gabled roof with asphalt shingles, although property record cards showed the building originally having wood shingles. The exterior is clad with horizontal wood lap siding.

Historical and Architectural Significance of Building

Building 1553 is one of ten contributing buildings within the Camp Pinchot Historic District. The significance of Building 1553 and Camp Pinchot lies in their association with the establishment and management of the Choctawhatchee National Forest (CNF). The CNF was one of the original eleven national forests created by President Theodore Roosevelt, and was the only forest in the southeastern United States.

Building 1553 is one of the original ancillary buildings constructed by the Forest Service at Camp Pinchot. The facility is not located on the 1914 Camp Pinchot map, but it does appear on a 1935 aerial photograph. The facility currently serves as a catering kitchen for Building 1559.

Existing Conditions

Building 1553 is in good condition with minor deterioration. Observed conditions include:

- Single-glazed fixed six-light wood window on south façade
- Visible rot deterioration on bottom row of painted horizontal wood lap siding
- Asphalt-shingle gabled roof in good condition
- Painted exposed wood rafters at eaves
- Concrete slab-on-grade foundation in good condition
- Textured marlite panel interior walls in fair condition
- Base and wall cabinets in fair condition



Figure 9 Interior of Building 1553

Previous Operation and Maintenance Costs

Table 19 O&M expenditures for Building 1553

Fiscal Year	Expended Funds
2003	\$ 723
2004	\$ 10,723
2005	\$ 1,054

Building Occupants and Plans

Building 1553 has no permanent occupants. It is used to prepare food for large gatherings held at Building 1559. The facility is part of the current Eglin housing privatization plan, with the preferred alternative being demolition. The preferred alternative does not require a catering kitchen, as the proposed GOQ will meet current AF standards and have an adequately sized kitchen.

Assessment of Use Capacity

Building 1553 has 210 gross square feet of space. The facility provides adequate space for a small kitchen but would be difficult to convert to a different use.

Reasonable Alternatives

Under Air Force occupancy, a reasonable alternative is No Work; the facility can support a base recreational complex in its current condition. With the housing privatization option a practical use is to continue in its current condition to support the developer's requirement to provide recreational opportunities to base personnel. Under the Air Force leasing option, the facility could be retained in its current condition, available for occasional use. The facility could make an excellent artifact processing and stabilization lab if Camp Pinchot was utilized as a conservation facility. If the Air Force decides to excess the property, a logical alternative is to swap the property in exchange for conservation easements.

Cost Estimates

The following tables show summaries for the various alternatives associated with Building 1553. Detailed breakdowns of each estimate can be found in Appendix A.

Option 1 – Base Recreational Facility

No work is planned on Building 1553 under this option. Estimated long-term O&M costs for Building 1553 total \$345,023.

Option 2 – Housing Developer Use as Offices

No work is planned for Building 1553 under this option. Estimated O&M costs for Building 1553 over the next 50 years total \$352,869.

Option 3 – Interpretive Center Partnership

No work is planned for Building 1553 under this option. Estimated O&M costs for Building 1553 over the next 50 years total \$352,869.

Option 4 – Renovation into GOQs, SOQs, and JNCOQs

No work is planned for Building 1553 under this option. It is estimated that O&M costs for the next 50 years will total \$349,792.

Option 5 – Renovation into JNCOQs

No work is planned for Building 1553 under this option. It is estimated that O&M costs for the next 50 years will total \$349,792.

Option 6 – Maintain Existing Quarters

No work is planned for Building 1553 under this option. Long-term O&M costs for the next 50 years is estimated at \$345,023.

Option 7 – Mothballing

Construction Division	Cost Totals
Mothballing	\$ 4,941.25
General Conditions	\$ 741.19
Escalation	\$ 123.53
Contingency	\$ 494.13
Contract Administration	\$ 504.01
Planning/Design	\$ 630.01
HABS Documentation (% of whole)	\$ 1,157.78
TOTAL	\$ 8,591.89
O & M estimate for 10 years	\$ 5,629.51

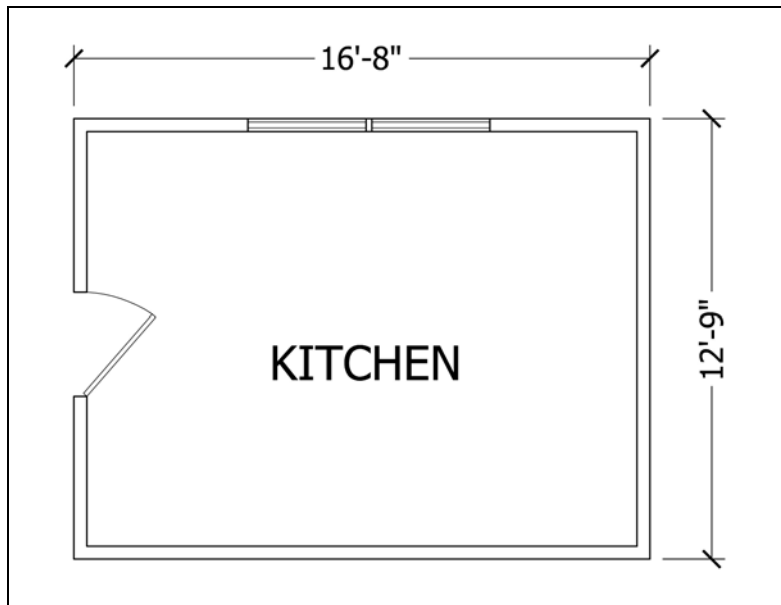
Option 8 – Demolition and New Construction

Construction Division	Cost Totals
Demolition	\$ 3,625.20
General Conditions	\$ 543.78
Escalation	\$ 90.63
Contingency	\$ 362.52
Contract Administration	\$ 369.77
Planning/Design	\$ 462.21
Utilities (% of whole)	\$ 4,888.11
Archaeology Mitigation (% of whole)	\$ 21,217.62
HABS Documentation (% of whole)	\$ 1,157.78
Site Improvements (% of whole)	\$ 1,688.50
Cost of New GOQ & 2 SOQs (% of whole)	\$ 18,172.30
TOTAL	\$ 34,406.12
O&M estimate for 50 years (% of whole)	DEMOLISHED

Option 9 – Demolition with Land Converted to a Park

Construction Division	Cost Totals
Demolition	\$ 3,625.20
General Conditions	\$ 543.78
Escalation	\$ 90.63
Contingency	\$ 362.52
Contract Administration	\$ 369.77
Planning/Design	\$ 462.21
Archaeology Mitigation (% of whole)	\$ 9,234.34
HABS Documentation (% of whole)	\$ 853.88
Site Improvements (% of whole)	\$ 7.81
TOTAL	\$ 15,550.14
O&M estimate for 50 years (% of whole)	DEMOLISHED

Floor Plan



Building 1555 – Garage



Figure 10 Looking north toward Building 1555.

Building History

Building 1555 was constructed by the United States Forest Service in 1910. It is shown on the 1914 Camp Pinchot map and is labeled as a smokehouse, but it was also known as a barn. The property is now used as a storage space for Building 1556.

The two-story facility sits on a modern poured-concrete foundation with poured footings. The yellow pine timber-frame construction is clad with horizontal pine-board siding, while the interior walls are exposed. Wood shingles on the gabled roof have been replaced with asphalt shingles. A six-over-six double-hung window is located on the north façade. The remaining windows are fixed with twelve lights.

Building 1555 has not been extensively modified since its original construction. The exterior remains in much of its original fabric except for the addition of a modern stairway. Half of the first floor has been framed in and finished to accommodate a small dwelling. The room has a full bathroom, kitchenette, and a bedroom. The remaining section can be used as a garage.

Historical and Architectural Significance of Building

Building 1555 is one of ten contributing buildings within the Camp Pinchot Historic District. The significance of Building 1555 and Camp Pinchot lies in their association with the establishment and management of the Choctawhatchee National Forest (CNF). The CNF was one of the original eleven national forests created by President Theodore Roosevelt, and was the only forest in the southeastern United States.

Building 1555 is one of the original ancillary buildings constructed by the Forest Service at Camp Pinchot. The facility was originally known noted as a smokehouse but was also known as a barn. Building 1555 currently serves as storage space for Building 1556.

Existing Conditions

Building 1555 is in good condition with some deterioration. The observed conditions include:

- Concrete slab-on-grade foundation in good condition
- Painted horizontal wood lap siding with visible rot deterioration along the bottom row
- Painted exposed rafters at eaves without a cornice system
- Gutter on south façade that has impact damage
- Visible rot at exterior millwork and window sill
- Window sash joinery in poor condition and glazing compound that has hardened
- Economical interior finishes

Previous Operation and Maintenance Costs

Table 20 O&M expenditures for Building 1555

Fiscal Year	Expended Funds
2003	\$ 910
2004	\$ 909
2005	\$ 2,573

Building Occupants and Plans

The building is used as storage space for the residents of Building 1556. Building 1555 does not have any permanent occupants. The garage is part of the Eglin Housing Privatization project, and the preferred alternative in this plan is the demolition of Building 1555.

Assessment of Use Capacity

Building 1555 contains approximately 480 gross square feet on each floor, totaling 960 gross square feet. Approximately half of that space is a garage while the other half is a small dwelling unit. The facility is too small to be converted into a feasible housing unit, but could continue to be used as a storage space or a small temporary quarters.

Reasonable Alternatives

Under Air Force occupancy, a reasonable alternative is conversion into a loft recreational cottage as part of a base recreational complex. With the housing privatization option, the building could continue as a light maintenance or storage facility. Under the Air Force leasing option, a viable use includes conversion into a curation facility in partnership with state and/or federal agencies. If the Air Force decides to excess the property, a logical alternative is to swap the property in exchange for conservation easements.

Cost Estimates

The following tables show summaries for the various alternatives associated with Building 1555. Detailed breakdowns of each estimate can be found in Appendix A.

Option 1 – Base Recreational Facility

Construction Division	Cost Totals
Building Code Compliance	\$ 13,559.00
Building Improvements	\$ 102,601.50
General Conditions	\$ 17,424.08
Escalation	\$ 2,904.01
Contingency	\$ 11,616.05
Contract Administration	\$ 11,848.37
Planning/Design	\$ 14,810.46
Utilities (% of whole)	\$ 5,403.16
TOTAL	\$ 180,166.63
O & M estimate for 50 years	\$ 1,342,544.83

Option 2 – Housing Developer Use as Offices

No work is planned for Building 1555 under this option. Long-term (50 years) O&M costs are estimated to be \$1,201,475.

Option 3 – Interpretive Center Partnership

Construction Division	Cost Totals
Building Code Compliance	\$ 58,199.00
Building Improvements	\$ 96,563.50
General Conditions	\$ 14,484.53
Escalation	\$ 2,414.09
Contingency	\$ 9,656.35
Contract Administration	\$ 9,849.48
Planning/Design	\$ 12,311.85
Utilities (% of whole)	\$ 6,701.24
Archaeology Mitigation (% of whole)	\$ 38,701.74
HABS Documentation (% of whole)	\$ 6,323.39
Site Improvements (% of whole)	\$ 3,883.43
TOTAL	\$ 259,088.58
<hr/>	
O & M estimate for 50 years	\$ 1,254,742.40

Option 4 – Renovation into GOQs, SOQs, and JNCOQs

No work is planned for Building 1555 under this option. It is estimated that Building 1555 O&M costs for the next 50 years would total \$1,201,475.

Option 5 – Renovation into JNCOQs

No work is planned for Building 1555 under this option. Estimated Building 1555 O&M costs for the next 50 years total \$1,201,475.

Option 6 – Maintain Existing Quarters

No work is planned for Building 1555 under this option. 50 years of O&M costs would total \$1,179,675 under this option.

Option 7 – Mothballing

Construction Division	Cost Totals
Mothballing	\$ 7,815.00
General Conditions	\$ 1,172.25
Escalation	\$ 195.38
Contingency	\$ 781.50
Contract Administration	\$ 797.13
Planning/Design	\$ 996.41
HABS Documentation (% of whole)	\$ 5,292.69
TOTAL	\$ 17,050.36
<hr/>	
O & M estimate for 10 years	\$ 25,734.90

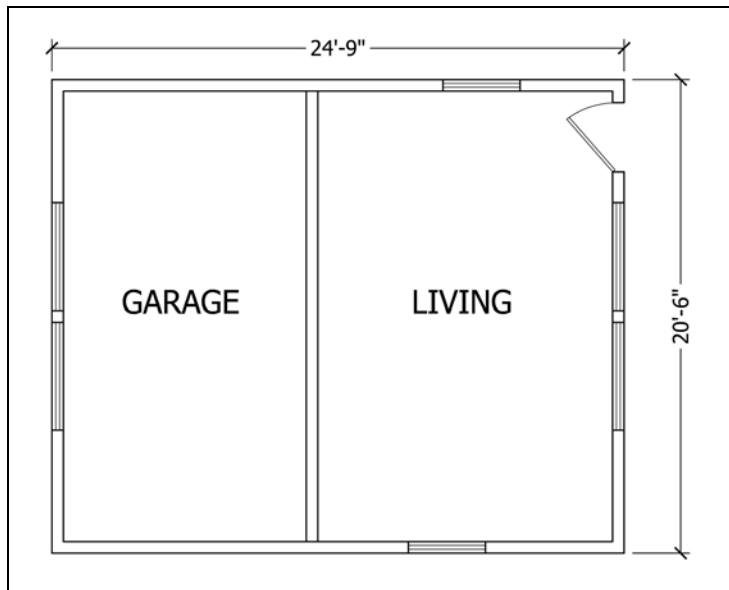
Option 8 – Demolition and New Construction

Construction Division	Cost Totals
Demolition	\$ 16,395.56
General Conditions	\$ 2,459.33
Escalation	\$ 409.89
Contingency	\$ 1,639.56
Contract Administration	\$ 1,672.35
Planning/Design	\$ 2,090.43
Utilities (% of whole)	\$ 22,345.66
Archaeology Mitigation (% of whole)	\$ 96,994.83
HABS Documentation (% of whole)	\$ 5,292.69
Site Improvements (% of whole)	\$ 7,718.84
Cost of New GOQ & 2 SOQs (% of whole)	\$ 83,073.39
TOTAL	\$ 157,019.14
O&M estimate for 50 years (% of whole)	DEMOLISHED

Option 9 – Demolition with Land Converted to a Park

Construction Division	Cost Totals
Demolition	\$ 16,395.56
General Conditions	\$ 2,459.33
Escalation	\$ 409.89
Contingency	\$ 1,639.56
Contract Administration	\$ 1,672.35
Planning/Design	\$ 2,090.43
Archaeology Mitigation (% of whole)	\$ 47,069.50
HABS Documentation (% of whole)	\$ 4,352.41
Site Improvements (% of whole)	\$ 39.79
TOTAL	\$ 76,128.82
O&M estimate for 50 years (% of whole)	DEMOLISHED

Floor Plan



Building 1556 – Officer's House



Figure 11 Looking southwest at Building 1556.

Building History

Building 1556 was constructed in 1910 by the United States Forest Service. It was one of four original residences constructed at Camp Pinchot. Originally known as "Ranger's Quarters," Building 1556 was also identified on early maps as Residence 4. The rectangular massed hipped-roof building was constructed on brick foundation piers with vertical board and batten siding attached to a timber frame. An off-center chimney is visible in early photographs, as well as a screened porch on the south façade.

Numerous additions and renovations have produced Building 1556's current U-shaped plan. These additions and renovations include enclosing the porch, adding additional living space, and filling in the foundation with concrete block to form a crawl space. The living room and enclosed porch have undergone the most recent renovations. These included the demolition of

the original south living room wall to create three arched openings to the sunroom. The sunroom was then subdivided into a sunroom off of the living room and a sitting room for the master bedroom. The living room was shortened to provide a new foyer and entry hall closets. Off of the living room sits a dining room that leads to the kitchen. To the north of the upgraded and modern kitchen sits a laundry room and bathroom addition. On the western wall of the living room is a fireplace. The other side of the fireplace opens into the master bedroom. To the north of the master bedroom sits two bath rooms. One is accessible only to the master bedroom, while the second is used as the main bathroom. A hallway leading from the living room passes the main bathroom and leads to the second bedroom.

Additional modifications and upgrades have occurred since the original construction. Permanent heating and air conditioning systems were added in the late 1950s. Original double-hung wood windows have been replaced by modern one-over-one double-hung metal windows. The plumbing systems have been updated and modern appliances added.

Historical and Architectural Significance of Building 1556

Building 1556 is one of ten contributing buildings within the Camp Pinchot Historic District. The significance of Building 1556 and Camp Pinchot lies in their association with the establishment and management of the Choctawhatchee National Forest (CNF). The CNF was one of the original eleven national forests created by President Theodore Roosevelt, and was the only forest in the southeastern United States.

Building 1556 is one of four original residences constructed by the Forest Service at Camp Pinchot. The facility was originally known as Residence 4, Ranger Station, and housed E. R. McKee, the first ranger stationed at Garnier's Bayou for the CNF. Building 1556 has housed a senior Air Force officer since 1950, as Camp Pinchot has been used by each base commander as the official Eglin residence since that time.

Existing Conditions

Building 1556 underwent extensive renovations during the 1990s and is in fair to good condition. Existing conditions were developed using the field team's observations and previous building surveys completed by Eglin. The conditions are:

- Roof structure, insulation, soffit, and fascia are in good condition
- Asphalt-shingle covering is in good condition
- Water stains on sunroom ceiling
- Masonry foundation is in good condition
- Noted animal infestations in the crawl space
- Exterior wood frame walls are in good condition
- Board-and-batten vertical wood siding in fair to good condition
- Single-glazed double-hung wood windows with single-glazed double-hung aluminum storm windows are in fair condition

- Aluminum-frame double-glazed insulated glass windows in sunroom are in fair condition
- Pine tongue-and-groove flooring; floor not level in various locations throughout the house; some missing floor filled in with wood putty
- Ceramic tiles in kitchen not level
- No visible evidence of carpenter ants or termites
- Carpeting in sunroom leans out because room was originally a porch sloping away from the house
- Centralized air conditioning and electric resistant heating system
- Furnaces for heating and cooling date from late 1990s and are in good condition
- Overhead electric service with fully ground panels
- Electric panel is in fair condition



Figure 12 View looking into living room from sunroom.

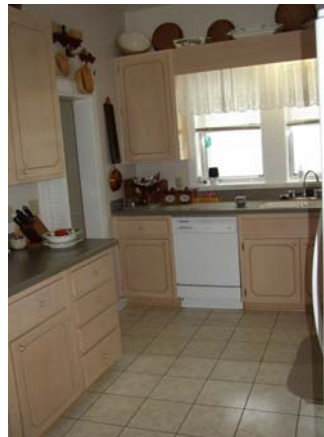


Figure 13 Remodeled kitchen.

Previous Operation and Maintenance Costs

Because Building 1556 is an SOQ, 96 CEG can spend up to \$25,000 per year on the maintenance and upkeep. However, this maintenance money is part of a larger pot of housing O&M funding that is used for all base housing. Eglin typically stays short of spending the entire \$25,000 in case of an emergency at the end of the fiscal year.

Throughout the past four fiscal years, Building 1556 has had numerous maintenance repairs. The work completed includes HVAC, electric, plumbing, roof, and communication repairs. The following table shows the expenditures (excluding grounds maintenance) per fiscal year:

Table 21 O&M expenditures for Building 1556

Fiscal Year	Expended Funds
2002	\$ 21,600
2003	\$ 2,000
2004	\$ 13,000
2005	\$ 900

Building Occupants and Plans

Building 1556 is currently occupied by a senior officer. The single-family house is listed as an SOQ facility in the Eglin housing. The house is part of the Eglin Housing Privatization project, and the preferred alternative in this plan is the demolition of Building 1556.

Assessment of Use Capacity

Building 1556 contains 2,483 gross square feet. According to current Air Force housing standards, Building 1556 does not meet current standards. A senior officer is entitled to four bedrooms, while this current facility has only two. The target range for an improved SOQ is 2,110 gross square feet while a new SOQ calls for 2,520 gross square feet. While the facility meets the spirit of the square footage requirements, the allocation of the space does not.

Reasonable Alternatives

Under Air Force occupancy, a reasonable alternative is to use the house as a rental unit in a base recreational complex. With the housing privatization option, a practical option is for the developer to use it as company offices, possibly leased out to Eglin housing agencies. Under the Air Force leasing option, a reasonable option includes conversion into natural and cultural resources offices in partnership with state and/or federal agencies. If the Air Force decides to excess the property, a rational alternative is to swap the property in exchange for conservation easements.

Cost Estimates

The following tables show summaries for the various alternatives associated with Building 1556. Detailed breakdowns of each estimate can be found in Appendix A.

Option 1 – Base Recreational Facility

Construction Division	Cost Totals
Building Code Compliance	\$ 14,730.00
Building Improvements	\$ 113,604.50
General Conditions	\$ 19,250.18
Escalation	\$ 3,208.36
Contingency	\$ 12,833.45
Contract Administration	\$ 13,090.12
Planning/Design	\$ 16,362.65
Utilities (% of whole)	\$ 6,481.18
TOTAL	\$ 199,560.43
<hr/>	
O & M estimate for 50 years	\$ 3,376,804.99

Option 2 – Housing Developer Use as Offices

Construction Division	Cost Totals
Building Code Compliance	\$ 66,738.00
Building Improvements	\$ 99,466.50
General Conditions	\$ 24,930.68
Escalation	\$ 4,155.11
Contingency	\$ 16,620.45
Contract Administration	\$ 16,952.86
Planning/Design	\$ 21,191.07
Utilities (% of whole)	\$ 11,708.08
Archaeology Mitigation (% of whole)	\$ 123,158.47
HABS Documentation (% of whole)	\$ 20,122.57
Site Improvements (% of whole)	\$ 12,358.03
TOTAL	\$ 417,401.82
<hr/>	
O & M estimate for 50 years	\$ 3,400,792.42

Option 3 – Interpretive Center Partnership

Construction Division	Cost Totals
Building Code Compliance	\$ 66,738.00
Building Improvements	\$ 99,466.50
General Conditions	\$ 24,930.68
Escalation	\$ 4,155.11
Contingency	\$ 16,620.45
Contract Administration	\$ 16,952.86
Planning/Design	\$ 21,191.07
Utilities (% of whole)	\$ 17,332.47
Archaeology Mitigation (% of whole)	\$ 100,100.44
HABS Documentation (% of whole)	\$ 16,355.17
Site Improvements (% of whole)	\$ 10,044.33
TOTAL	\$ 393,887.08
<hr/>	
O & M estimate for 50 years	\$ 3,400,792.42

Option 4 – Renovation into GOQs, SOQs, and JNCOQs

Construction Division	Cost Totals
Bldg Renovations & Additions	\$ 44,000.00
Bldg Improvements	\$ 111,366.50
General Conditions	\$ 23,304.98
Escalation	\$ 3,884.16
Contingency	\$ 15,536.65
Contract Administration	\$ 15,847.38
Planning/Design	\$ 19,809.23
Utilities (% of whole)	\$ 91,911.33
Archaeology Mitigation (% of whole)	\$ 166,549.57
HABS Documentation	\$ 21,769.71
TOTAL	\$ 513,979.51
O & M estimate for 50 years	\$ 3,433,189.08

Option 5 – Renovation into JNCOQs

Construction Division	Cost Totals
Building Renovations and Additions	\$ 11,137.50
Building Improvements	\$ 111,366.50
General Conditions	\$ 18,375.60
Escalation	\$ 3,062.60
Contingency	\$ 12,250.40
Contract Administration	\$ 12,495.41
Planning/Design	\$ 15,619.26
Utilities (% of whole)	\$ 91,911.33
Archaeology Mitigation (% of whole)	\$ 133,239.65
HABS Documentation (% of whole)	\$ 21,769.71
TOTAL	\$ 431,227.96
O & M estimate for 50 years	\$ 3,433,189.08

Option 6 – Maintain Existing Quarters

Construction Division	Cost Totals
Building Improvements	\$ 94,356.50
General Conditions	\$ 14,153.48
Escalation	\$ 2,358.91
Contingency	\$ 9,435.65
Contract Administration	\$ 9,624.36
Planning/Design	\$ 12,030.45
TOTAL	\$ 141,959.35
O & M estimate for 50 years	\$ 3,945,413.54

Option 7 – Mothballing

Construction Division	Cost Totals
Mothballing	\$ 10,038.75
General Conditions	\$ 1,505.81
Escalation	\$ 250.97
Contingency	\$ 1,003.88
Contract Administration	\$ 1,023.95
Planning/Design	\$ 1,279.94
HABS Documentation (% of whole)	\$ 13,689.33
TOTAL	\$ 28,792.63
O & M estimate for 10 years	\$ 66,562.24

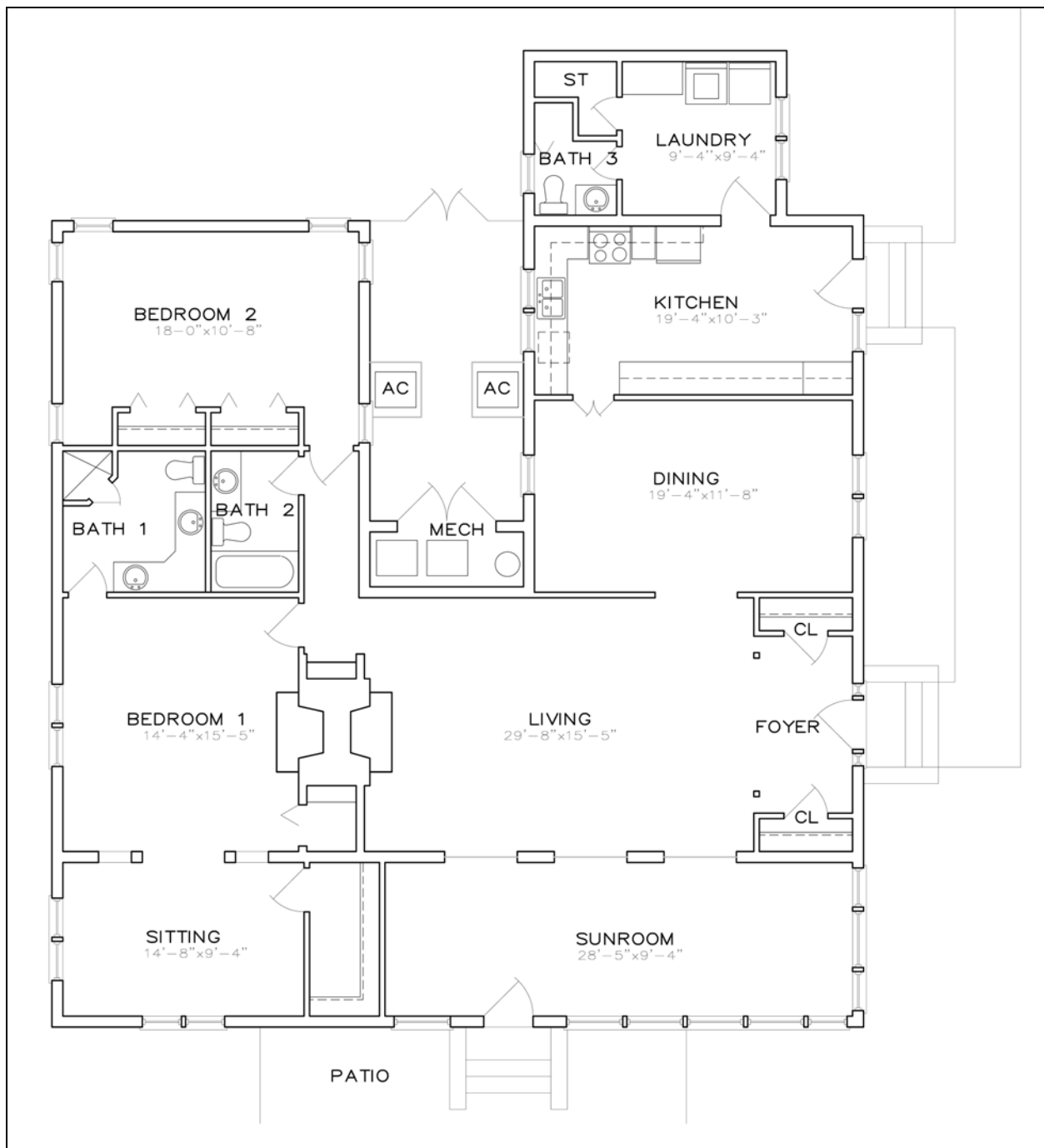
Option 8 – Demolition and New Construction

Construction Division	Cost Totals
Demolition	\$ 26,177.88
General Conditions	\$ 3,926.68
Escalation	\$ 654.45
Contingency	\$ 2,617.79
Contract Administration	\$ 2,670.14
Planning/Design	\$ 3,337.68
Utilities (% of whole)	\$ 57,796.11
Archaeology Mitigation (% of whole)	\$ 250,873.07
HABS Documentation (% of whole)	\$ 13,689.33
Site Improvements (% of whole)	\$ 19,964.47
Cost of New GOQ & 2 SOQs (% of whole)	\$ 214,865.85
TOTAL	\$ 381,707.61
O&M estimate for 50 years (% of whole)	DEMOLISHED

Option 9 – Demolition with Land Converted to a Park

Construction Division	Cost Totals
Demolition	\$ 26,177.88
General Conditions	\$ 3,926.68
Escalation	\$ 654.45
Contingency	\$ 2,617.79
Contract Administration	\$ 2,670.14
Planning/Design	\$ 3,337.68
Archaeology Mitigation (% of whole)	\$ 77,145.25
HABS Documentation (% of whole)	\$ 7,133.45
Site Improvements (% of whole)	\$ 65.21
TOTAL	\$ 123,728.53
O&M estimate for 50 years (% of whole)	DEMOLISHED

Floor Plan



Building 1557 – Cottage



Figure 14 Looking south at Building 1557.

Building History

Building 1557 was constructed in 1910 by the Forest Service. The building was one of four original residences constructed at Camp Pinchot. Shown as Residence 3 on early maps, the facility was also known as the Clerk's Quarters. Residence 3 was a hall and parlor vernacular dwelling on brick piers with a chimney, gabled roof, screened front porch, and vertical siding.

Since 1910, the facility has been modified and updated from its original layout. The open space between the brick piers has been filled in to create a crawl space. Additions have expanded the building to include two additional bedrooms, a kitchen, and a formal entry with foyer. The original screened porch has been enclosed to provide additional living space. Additionally, a laundry room has been placed inside the enclosed porch. The exterior vertical board and batten siding has remained, with new additions mimicking the original siding.

One original window from the Forest Service time period remains. The remaining windows are double-hung wood windows that date from mid-century. They are covered with aluminum storm windows. The electrical, mechanical, and plumbing systems have all been upgraded since the Air Force took control of the property in 1940.

Historical and Architectural Significance of Building

Building 1557 is one of ten contributing buildings within the Camp Pinchot Historic District. The significance of Building 1557 and Camp Pinchot lies in their association with the establishment and management of the Choctawhatchee National Forest (CNF). The CNF was one of the original eleven national forests created by President Theodore Roosevelt, and was the only forest in the southeastern United States.

Building 1557 is one of four original residences constructed by the Forest Service at Camp Pinchot. The facility was originally known as Residence 3, Clerk's Quarters. Building 1557 has housed an Air Force officer since 1950, as Camp Pinchot has been used by each base commander as the official Eglin residence since that time.

Existing Conditions

Building 1557 is currently designated as a CGO (Company Grade Officer) house. The house is in fair condition. Utilizing Eglin's *Housing Community Profile* and HDC's field visit, the following existing conditions are noted:

- Asphalt-shingle gabled and shed roofs with no gutters
- Cornice formed by wood fascia, rake board, and shingle mold
- Soffit, fascia, roof covering, and roof structure are in fair condition
- Facility has three types of exterior siding: vertical wood board-and-batten siding, horizontal wood lap siding, and vertical masonite panel siding
- Wood siding in poor condition with assumed encapsulated lead based paint
- Raised foundation in poor condition
- Crawlspace with no visible vents
- Wood floors are uneven throughout housing unit
- Visible shear cracks on exterior slab-on-grade patio
- Single-glazed double-hung wood windows with single-glazed aluminum storm windows
- Double-hung wood frame windows date from mid-century; some do not shut all the way, creating a draft in the winter
- Four-pane aluminum awning/jalousie windows in laundry area
- Mid-century wood doors in poor condition
- Centralize air conditioning and electric resistant heating system
- Gas heating system in good condition
- Exterior electric cooling system dates from 1986 and is in poor condition
- Overhead electric service, fully grounded panel and wiring

- Electrical panel and receptacles are in poor condition and approaching or beyond service life
- Interior finishes are in fair condition
- Kitchen includes older cabinets with newer countertops



Figure 15 Windows dating to original construction period in sunroom.



Figure 16 Kitchen, view from living room.

Previous Operation and Maintenance Costs

Building 1557 has been repaired for various items throughout the past four fiscal years. The work completed includes window and doors, HVAC, communication, electric, and plumbing repairs. The following table shows the expenditures (excluding grounds maintenance) per fiscal year:

Table 22 O&M expenditures for Building 1557

Fiscal Year	Expended Funds
2002	\$ 3,000
2003	\$ 3,100
2004	\$ 1,900
2005	\$ -

Building Occupants and Plans

The building is currently listed as a three-bedroom CGO unit and is currently occupied by an officer. The house is part of the Eglin Housing Privatization project, and the preferred alternative in the plan is to demolish Building 1557 and construct two GOQ units and one SOQ unit.

Assessment of Use Capacity

Building 1557 has 1,545 gross square feet. According to current Air Force housing standards, if this unit were to be improved, the target for the facility would be 1,670 gross square feet. For new three-bedroom CGO units, the target is for 1,860 gross square feet.

Reasonable Alternatives

Under Air Force occupancy, a practical alternative is to use the house as a rental cottage in a base recreational complex. With the housing privatization option, a reasonable alternative is for the developer to use it as company offices, possibly leased out to Eglin housing agencies. Under the Air Force leasing option, a viable use includes conversion into natural and cultural resources offices in partnership with state and/or federal agencies. If the Air Force decides to excess the property, a practical alternative is to swap the property in exchange for conservation easements.

Cost Estimates

The following tables show summaries for the various alternatives associated with Building 1557. Detailed breakdowns of each estimate can be found in Appendix A.

Option 1 – Base Recreational Facility

Construction Division	Cost Totals
Building Code Compliance	\$ 19,253.75
Building Improvements	\$ 79,674.50
General Conditions	\$ 14,839.24
Escalation	\$ 2,473.21
Contingency	\$ 9,892.83
Contract Administration	\$ 10,090.68
Planning/Design	\$ 12,613.35
Utilities (% of whole)	\$ 4,032.79
TOTAL	\$ 152,870.34
<hr/>	
O & M estimate for 50 years	\$ 2,138,314.20

Option 2 – Housing Developer Use as Offices

Construction Division	Cost Totals
Building Code Compliance	\$ 75,878.75
Building Improvements	\$ 66,530.50
General Conditions	\$ 21,361.39
Escalation	\$ 3,560.23
Contingency	\$ 14,240.93
Contract Administration	\$ 14,525.74
Planning/Design	\$ 18,157.18
Utilities (% of whole)	\$ 7,285.13
Archaeology Mitigation (% of whole)	\$ 76,633.04
HABS Documentation (% of whole)	\$ 12,520.89
Site Improvements (% of whole)	\$ 7,689.55
TOTAL	\$ 318,383.33
<hr/>	
O & M estimate for 50 years	\$ 2,184,066.54

Option 3 – Interpretive Center Partnership

Construction Division	Cost Totals
Building Code Compliance	\$ 75,878.75
Building Improvements	\$ 66,530.50
General Conditions	\$ 21,361.39
Escalation	\$ 3,560.23
Contingency	\$ 14,240.93
Contract Administration	\$ 14,525.74
Planning/Design	\$ 18,157.18
Utilities (% of whole)	\$ 10,784.80
Archaeology Mitigation (% of whole)	\$ 62,285.62
HABS Documentation (% of whole)	\$ 10,176.70
Site Improvements (% of whole)	\$ 6,249.89
TOTAL	\$ 303,751.73
<hr/>	
O & M estimate for 50 years	\$ 2,184,066.54

Option 4 – Renovation into GOQs, SOQs, and JNCOQs

Construction Division	Cost Totals
Bldg Renovations & Additions	\$ 76,325.00
Bldg Improvements	\$ 69,280.50
General Conditions	\$ 21,840.83
Escalation	\$ 3,640.14
Contingency	\$ 14,560.55
Contract Administration	\$ 14,851.76
Planning/Design	\$ 18,564.70
Utilities (% of whole)	\$ 57,190.09
Archaeology Mitigation (% of whole)	\$ 103,632.33
HABS Documentation (% of whole)	\$ 13,545.79
TOTAL	\$ 393,431.69
O & M estimate for 50 years	\$ 2,173,398.14

Option 5 – Renovation into JNCOQs

Construction Division	Cost Totals
Building Renovations and Additions	\$ 50,700.00
Building Improvements	\$ 69,280.50
General Conditions	\$ 17,997.08
Escalation	\$ 2,999.51
Contingency	\$ 11,998.05
Contract Administration	\$ 12,238.01
Planning/Design	\$ 15,297.51
Utilities (% of whole)	\$ 57,190.09
Archaeology Mitigation (% of whole)	\$ 82,905.87
HABS Documentation (% of whole)	\$ 13,545.79
TOTAL	\$ 334,152.41
O & M estimate for 50 years	\$ 2,173,398.14

Option 6 – Maintain Existing Quarters

Construction Division	Cost Totals
Building Improvements	\$ 66,530.50
General Conditions	\$ 9,979.58
Escalation	\$ 1,663.26
Contingency	\$ 6,653.05
Contract Administration	\$ 6,786.11
Planning/Design	\$ 8,482.64
TOTAL	\$ 100,095.14
O & M estimate for 50 years	\$ 2,492,120.17

Option 7 – Mothballing

Construction Division	Cost Totals
Mothballing	\$ 11,782.50
General Conditions	\$ 1,767.38
Escalation	\$ 294.56
Contingency	\$ 1,178.25
Contract Administration	\$ 1,201.82
Planning/Design	\$ 1,502.27
HABS Documentation (% of whole)	\$ 8,517.93
TOTAL	\$ 26,244.70
O & M estimate for 10 years	\$ 41,417.10

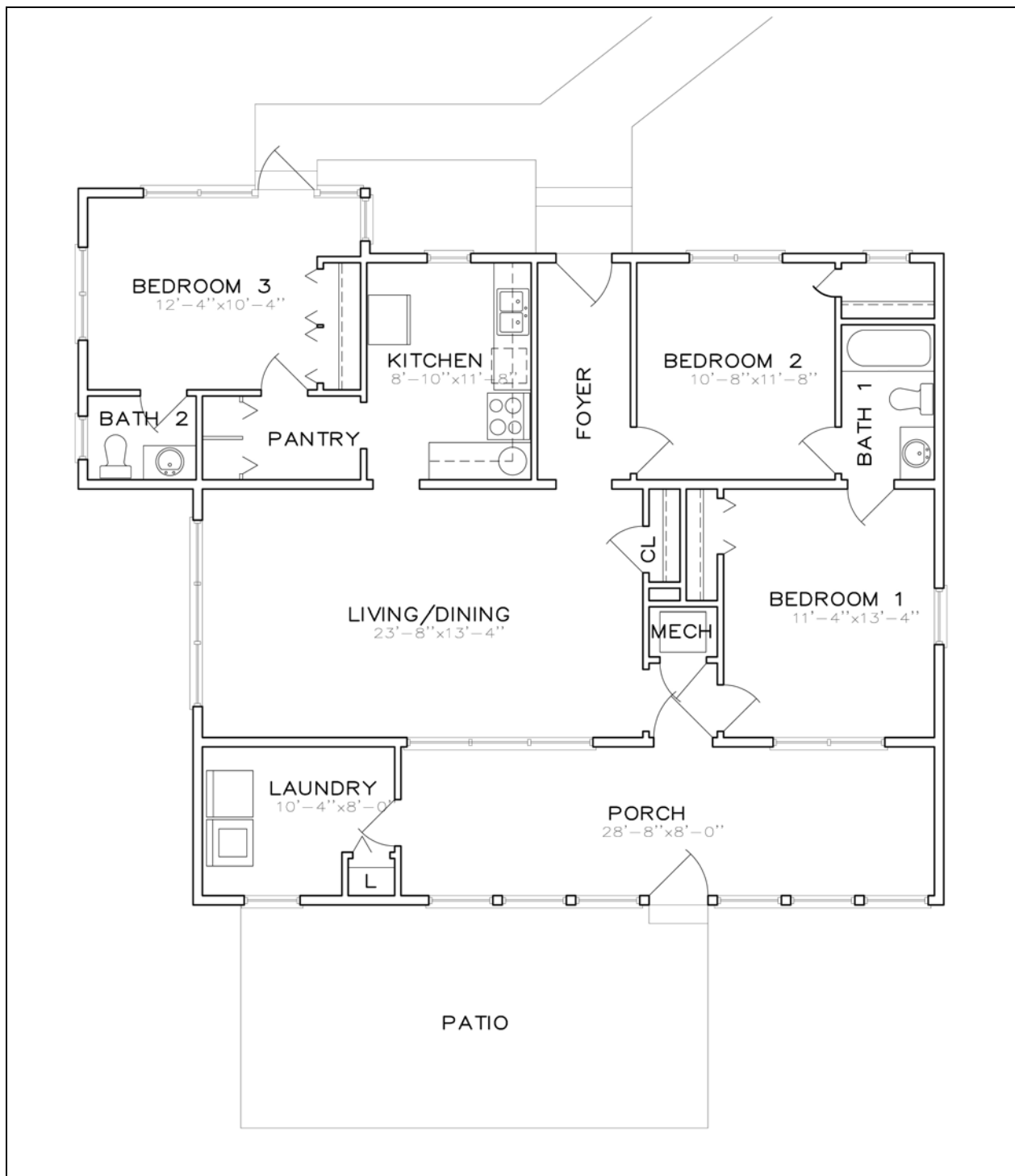
Option 8 – Demolition and New Construction

Construction Division	Cost Totals
Demolition	\$ 18,947.77
General Conditions	\$ 2,842.17
Escalation	\$ 473.69
Contingency	\$ 1,894.78
Contract Administration	\$ 1,932.67
Planning/Design	\$ 2,415.84
Utilities (% of whole)	\$ 35,962.54
Archaeology Mitigation (% of whole)	\$ 156,101.05
HABS Documentation (% of whole)	\$ 8,517.93
Site Improvements (% of whole)	\$ 12,422.52
Cost of New GOQ & 2 SOQs (% of whole)	\$ 133,696.23
TOTAL	\$ 241,510.95
O&M estimate for 50 years (% of whole)	DEMOLISHED

Option 9 – Demolition with Land Converted to a Park

Construction Division	Cost Totals
Demolition	\$ 18,947.77
General Conditions	\$ 2,842.17
Escalation	\$ 473.69
Contingency	\$ 1,894.78
Contract Administration	\$ 1,932.67
Planning/Design	\$ 2,415.84
Archaeology Mitigation (% of whole)	\$ 52,680.65
HABS Documentation (% of whole)	\$ 4,871.26
Site Improvements (% of whole)	\$ 44.53
TOTAL	\$ 86,103.36
O&M estimate for 50 years (% of whole)	DEMOLISHED

Floor Plan



Building 1558 – Cottage



Figure 17 Looking south toward Building 1558.

Building History

Constructed in 1910, Building 1558 was originally known as Residence 2, Deputy Supervisor's Quarters. The facility was originally a square plan with a screened porch on the south façade. Set on brick piers, the original wood-frame house had horizontal wood weatherboard siding. A central brick chimney with a tall chimney pot was located at the apex of the pyramidal roof. The screened porch had a hipped roof.

Throughout its lifetime, the facility has undergone numerous renovations to add living space. The screened porch has become fully enclosed. A bathroom was added on the west façade. The living room has been expanded to the east, while a second bedroom and utility room have been added to the north façade. Each addition has kept with the exterior fabric of the facility by cladding the exterior in horizontal siding.

Original wood windows have been replaced with double-hung wood windows and aluminum storm windows. The original chimney pot has been replaced by a modern aluminum flue. Electrical wiring and circuitry are modern. The plumbing and mechanical systems have also been modernized.

Historical and Architectural Significance of Building

Building 1558 is one of ten contributing buildings within the Camp Pinchot Historic District. The significance of Building 1558 and Camp Pinchot lies in their association with the establishment and management of the Choctawhatchee National Forest (CNF). The CNF was one of the original eleven national forests created by President Theodore Roosevelt, and was the only forest in the southeastern United States.

Building 1558 is one of four original residences constructed by the Forest Service at Camp Pinchot. The facility was originally known as Residence 2, Deputy Supervisor's Quarters and was originally occupied by W. F. Hill. Building 1558 has housed an Air Force officer since 1950; Camp Pinchot has been used by each base commander as the official Eglin residence since that time.

Existing Conditions

Building 1558 is currently designated as a JNCOQ (Junior Non-Commissioned Officer Quarters). The facility is in fair condition with various deficiencies. The following existing conditions were developed from an HDC site visit and Eglin's *Housing Community Profile*:

- Asphalt-shingle hipped and shed roofs with no guttering
- Roof covering, structure, soffit, and fascia in fair condition
- Raised foundation in fair condition
- Sub-flooring system is deteriorated and in poor condition
- Exterior wall structure in fair condition with potential termite damage
- Termite damage on bathroom addition, visible from exterior
- Deteriorating wood siding
- Mold growth on some exterior siding
- Wood double-hung windows painted shut and missing cords
- Wood framing for windows contain lead based paint
- Peeling paint in some rooms; paint is several layers thick
- Pest infestation during summer months
- Interior wood floors are not level in all locations
- Gas heating is approximately eight years old and in good condition
- Electric cooling is approaching or beyond service life of equipment
- Electrical panel is in poor condition and does not meet minimum Ampere standards
- Electrical receptacles are in good condition
- Interior finishes are in fair condition

- VCT flooring in kitchen with older cabinets and modern countertops
- Brick masonry piers still visible at corners
- Concrete masonry infill in fair condition



Figure 18 Living room.



Figure 19 Kitchen, view from living room.



Figure 20 Termite damage at southwest corner of house.



Figure 21 Close-up of termite damage.

Previous Operation and Maintenance Costs

Various repairs have occurred throughout the past four fiscal years at Building 1558. Maintenance issues arose with the following building systems: HVAC, electrical, plumbing, and architectural. The following table shows the expenditures (excluding grounds maintenance) per fiscal year:

Table 23 O&M expenditures for Building 1558

Fiscal Year	Expended Funds
2002	\$ 400
2003	\$ 500
2004	\$ 1,100
2005	\$ 400

Building Occupants and Plans

Building 1558 is currently designated as a two-bedroom JNCOQ unit and is currently occupied. A Security Forces member currently resides in the house. As part of the Eglin Housing Privatization project, the preferred alternative is to demolish Building 1558 and construct two GOQ units and one SOQ unit.

Assessment of Use Capacity

The facility has 1,410 gross square feet. According to current Air Force standards, if this two-bedroom unit were to be improved, the target would be 1,330 gross square feet. If the unit was replaced and a similar unit constructed, the facility would target 1,480 gross square feet.

Reasonable Alternatives

Under Air Force occupancy, a reasonable alternative is to use the house as a rental cottage in a base recreational complex. With the housing privatization option, the best use is for the developer to use it as company offices, possibly leased out to Eglin housing agencies. Under the Air Force leasing option, a viable use includes conversion into natural and cultural resources offices in partnership with state and/or federal agencies. If the Air Force decides to excess the property, a logical alternative is to swap the property in exchange for conservation easements.

Cost Estimates

The following tables show summaries for the various alternatives associated with Building 1558. Detailed breakdowns of each estimate can be found in Appendix A.

Option 1 – Base Recreational Facility

Construction Division	Cost Totals
Building Code Compliance	\$ 17,637.50
Building Improvements	\$ 81,089.00
General Conditions	\$ 14,808.98
Escalation	\$ 2,468.16
Contingency	\$ 9,872.65
Contract Administration	\$ 10,070.10
Planning/Design	\$ 12,587.63
Utilities (% of whole)	\$ 3,680.41
TOTAL	\$ 152,214.43
<hr/>	
O & M estimate for 50 years	\$ 1,914,617.46

Option 2 – Housing Developer Use as Offices

Construction Division	Cost Totals
Building Code Compliance	\$ 82,597.50
Building Improvements	\$ 69,737.00
General Conditions	\$ 22,850.18
Escalation	\$ 3,808.36
Contingency	\$ 15,233.45
Contract Administration	\$ 15,538.12
Planning/Design	\$ 19,422.65
Utilities (% of whole)	\$ 6,648.57
Archaeology Mitigation (% of whole)	\$ 69,936.95
HABS Documentation (% of whole)	\$ 11,426.83
Site Improvements (% of whole)	\$ 7,017.65
TOTAL	\$ 324,217.25
<hr/>	
O & M estimate for 50 years	\$ 2,007,142.58

Option 3 – Interpretive Center Partnership

Construction Division	Cost Totals
Building Code Compliance	\$ 82,597.50
Building Improvements	\$ 69,737.00
General Conditions	\$ 22,850.18
Escalation	\$ 3,808.36
Contingency	\$ 15,233.45
Contract Administration	\$ 15,538.12
Planning/Design	\$ 19,422.65
Utilities (% of whole)	\$ 9,842.44
Archaeology Mitigation (% of whole)	\$ 56,843.18
HABS Documentation (% of whole)	\$ 9,287.47
Site Improvements (% of whole)	\$ 5,703.79
TOTAL	\$ 310,864.14
<hr/>	
O & M estimate for 50 years	\$ 2,007,142.58

Option 4 – Renovation into GOQs, SOQs, and JNCOQs

Construction Division	Cost Totals
Bldg Renovations & Additions	\$ 29,200.00
Bldg Improvements	\$ 77,068.56
General Conditions	\$ 15,940.28
Escalation	\$ 2,656.71
Contingency	\$ 10,626.86
Contract Administration	\$ 10,839.39
Planning/Design	\$ 13,549.24
Utilities (% of whole)	\$ 52,192.90
Archaeology Mitigation (% of whole)	\$ 94,577.08
HABS Documentation	\$ 12,362.18
TOTAL	\$ 319,013.21
O & M estimate for 50 years	\$ 1,946,635.81

Option 5 – Renovation into JNCOQs

Construction Division	Cost Totals
Building Renovations and Additions	\$ 29,425.00
Building Improvements	\$ 77,068.56
General Conditions	\$ 15,974.03
Escalation	\$ 2,662.34
Contingency	\$ 10,649.36
Contract Administration	\$ 10,862.34
Planning/Design	\$ 13,577.93
Utilities (% of whole)	\$ 52,192.90
Archaeology Mitigation (% of whole)	\$ 75,661.66
HABS Documentation (% of whole)	\$ 12,362.18
TOTAL	\$ 300,436.31
O & M estimate for 50 years	\$ 1,946,635.81

Option 6 – Maintain Existing Quarters

Construction Division	Cost Totals
Building Improvements	\$ 69,737.00
General Conditions	\$ 10,460.55
Escalation	\$ 1,743.43
Contingency	\$ 6,973.70
Contract Administration	\$ 7,113.17
Planning/Design	\$ 8,891.47
TOTAL	\$ 104,919.32
O & M estimate for 50 years	\$ 2,237,508.34

Option 7 – Mothballing

Construction Division	Cost Totals
Mothballing	\$ 12,545.00
General Conditions	\$ 1,881.75
Escalation	\$ 313.63
Contingency	\$ 1,254.50
Contract Administration	\$ 1,279.59
Planning/Design	\$ 1,599.49
HABS Documentation (% of whole)	\$ 7,773.64
TOTAL	\$ 26,647.60
O & M estimate for 10 years	\$ 37,798.13

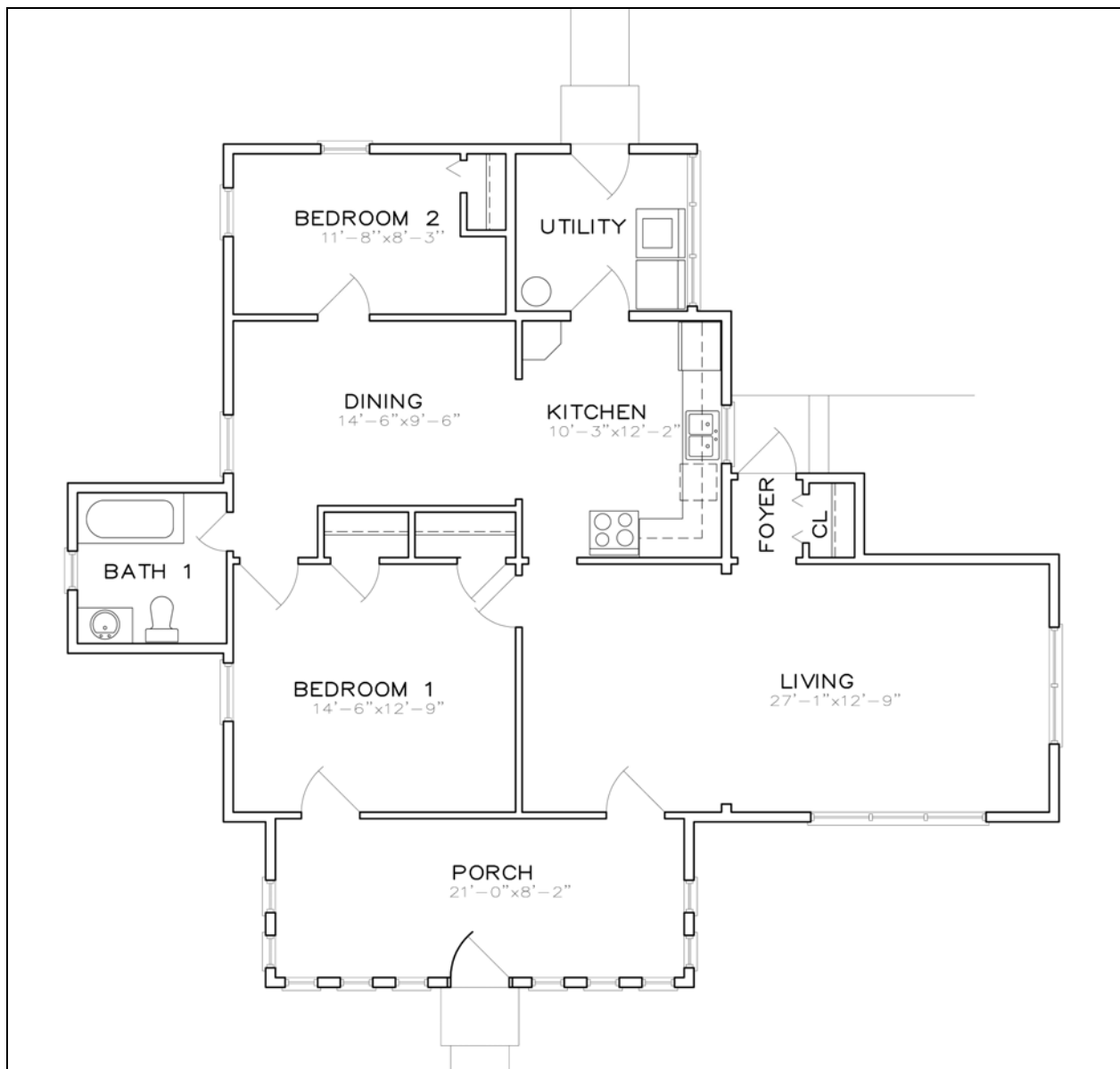
Option 8 – Demolition and New Construction

Construction Division	Cost Totals
Demolition	\$ 19,282.82
General Conditions	\$ 2,892.42
Escalation	\$ 482.07
Contingency	\$ 1,928.28
Contract Administration	\$ 1,966.85
Planning/Design	\$ 2,458.56
Utilities (% of whole)	\$ 32,820.19
Archaeology Mitigation (% of whole)	\$ 142,461.15
HABS Documentation (% of whole)	\$ 7,773.64
Site Improvements (% of whole)	\$ 11,337.05
Cost of New GOQ & 2 SOQs (% of whole)	\$ 122,014.04
TOTAL	\$ 223,403.04
O&M estimate for 50 years (% of whole)	DEMOLISHED

Option 9 – Demolition with Land Converted to a Park

Construction Division	Cost Totals
Demolition	\$ 19,282.82
General Conditions	\$ 2,892.42
Escalation	\$ 482.07
Contingency	\$ 1,928.28
Contract Administration	\$ 1,966.85
Planning/Design	\$ 2,458.56
Archaeology Mitigation (% of whole)	\$ 55,854.95
HABS Documentation (% of whole)	\$ 5,164.79
Site Improvements (% of whole)	\$ 47.22
TOTAL	\$ 90,077.96
O&M estimate for 50 years (% of whole)	DEMOLISHED

Floor Plan



Building 1559 – Base Commander’s Quarters



Figure 22 Looking south at Building 1559.

Building History

Building 1559 was constructed in phases, beginning in 1912, by the United States Forest Service. The unit was delineated by the Forest Service as Residence 1, Supervisor’s Quarters. The first occupant of the property was Inman Eldredge, the first supervisor of the Choctawhatchee National Forest. Building 1559 was constructed in phases due to the limited budget of the Forest Service. The first building was a small one-bedroom unit. The second was a similar unit approximately 30 feet away. In 1914, Eldredge joined the two residences into one large unit and enclosed the back porch.

The building was clad with hollow tiles with scored grooves laid in a checkerboard pattern. The blocks were installed to support a stucco finish that was completed some time after the original construction period. The facility had one bedroom on the east side and two bedrooms separated by a bathroom on the west side. It is believed that these bedrooms were the original separate buildings. A living room and hallway connected the bedrooms at this time. The building

remained this size after it became Air Force property until 1950, when the house was changed to General's Quarters.

One of the first additions was to add over 500 square feet of living space. New air-conditioning was added in 1954, and the screened-in porch was enclosed two years later. A crawl space was created by filling in the voids between the brick pier foundations. The wood-shingled roof was replaced with composition shingles, and a laundry room was added. Interior modifications included new cabinets for the kitchen and bathroom.

Additional renovations were completed between 1978 and 1981, including a dining-room relocation, a bathroom, and new electrical wiring. A bar was added to the enclosed porch in 1983. In 1993-1994, a storage area was added to the master bedroom. Additional work included the expansion of the dining room and enlarged doors connecting the living room and the sunroom. Recent renovations included the enlargement of the dining room to accommodate large dinner parties.

Historical and Architectural Significance of Building 1559

Building 1559 is one of ten contributing buildings within the Camp Pinchot Historic District. The significance of Building 1557 and Camp Pinchot lies in their association with the establishment and management of the Choctawhatchee National Forest (CNF). The CNF was one of the original eleven national forests created by President Theodore Roosevelt and was the only forest in the southeastern United States.

Building 1559 is one of four original residences constructed by the Forest Service at Camp Pinchot. The facility was originally known as Residence 1, Supervisor's Quarters, and housed the original CNF Forest Supervisor, Inman Eldredge. Building 1559 has housed the commanding officer of Eglin since 1950.

Existing Conditions

Building 1559 is in fair to good condition. The building has been well maintained because it is the Commanding General's residence. The observed conditions include:

- Roof structure, insulation, soffit, and fascia are in good condition with some staining and minor deterioration
- Wet roof rafters over sunroom are evident when sunroom ceilings are opened
- Wood-framed and terra cotta block tile exterior walls are in good condition.
- Termites are suspected to be within the walls of the facility; although no one knows for sure because no walls have been opened up recently
- The enclosed porch has vertical wood shiplap siding
- Stucco is the prominent exterior finish and is in good condition
- Masonry foundation is in good condition
- Wood floor joists, although uneven in some areas, are in good condition

- Four-over-one wood windows dating from the 1930s/1940s are leaking and allow air and dirt to blow into the house
- Aluminum replacement windows are fixed
- Wood entry doors are in excellent condition
- Carpenter ants have been problematic in the kitchen
- Kitchen has been updated
- Two gas-fired furnaces from the late 1990s are in good condition
- Cooling coils from the late 1990s are in good condition
- The two electrical panels at the property are in good condition
- Electrical receptacles are in good condition
- Interior finishes are in fair to good condition



Figure 23 Living room, view from dining room.



Figure 24 Looking toward the sunroom bar.

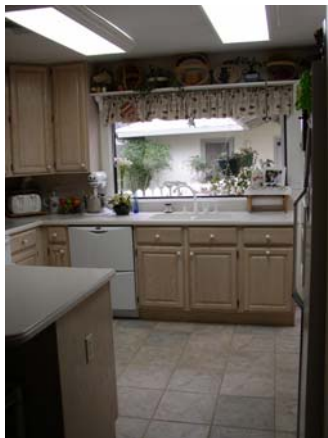


Figure 25 Remodeled kitchen.



Figure 26 Former exterior windows now located in sunroom.

Previous Operation and Maintenance Costs

Because Building 1559 is a GOQ, 96 CEG can spend up to \$35,000 per year on its maintenance and upkeep. However, this maintenance money is part of a larger pot of housing O&M funding that is used for all base housing. Additionally, since the Air Force is not publicly insured, Eglin typically stays short of spending the entire \$35,000 in case of an emergency in September.

Throughout the past four fiscal years, Building 1559 has had numerous maintenance issues arise. These issues are noted in work order requests and include: architectural, HVAC, plumbing, and electrical system repairs. The following table shows the expenditures (excluding grounds maintenance) per fiscal year:

Table 24 O&M expenditures for Building 1559

Fiscal Year	Expended Funds
2002	\$ 5,300
2003	\$ 5,000
2004	\$ 1,900
2005	\$ 1,300

Building Occupants and Plans

Building 1559 is designated as a GOQ facility. The Base Commander currently lives in the house. As part of the Eglin Housing Privatization project, the preferred alternative is to demolish Building 1559 and construct two GOQ units and one SOQ unit at Historic Camp Pinchot.

Assessment of Use Capacity

Building 1559 has 3,041 gross square feet and does not meet current Air Force GOQ standards. The standards call for a GOQ to be four bedrooms; Building 1559 only has three. In addition to adding a fourth bedroom in an improvement, the target square footage would be 2,600 gross square feet. If the unit was replaced and a similar unit constructed, the facility would target 3,330 gross square feet.

Reasonable Alternatives

Under Air Force occupancy, a reasonable alternative is to use the house as a rental cottage in a base recreational complex. With the housing privatization option, a logical alternative is for the developer to use it as company offices, possibly leased out to Eglin housing agencies. Under the Air Force leasing option, a practical use includes conversion into a natural and cultural resources interpretive center in partnership with state and/or federal agencies. If the Air Force decides to excess the property, a logical alternative is to swap the property in exchange for conservation easements.

Cost Estimates

The following tables show summaries for the various alternatives associated with Building 1559. Detailed breakdowns of each estimate can be found in Appendix A.

Option 1 – Base Recreational Facility

Construction Division	Cost Totals
Building Code Compliance	\$ 35,899.50
Building Improvements	\$ 64,112.00
General Conditions	\$ 15,001.73
Escalation	\$ 2,500.29
Contingency	\$ 10,001.15
Contract Administration	\$ 10,201.17
Planning/Design	\$ 12,751.47
Utilities (% of whole)	\$ 7,937.68
TOTAL	\$ 158,404.98
O & M estimate for 50 years	\$ 4,081,979.43

Option 2 – Housing Developer Use as Offices

Construction Division	Cost Totals
Building Code Compliance	\$ 95,812.00
Building Improvements	\$ 123,119.00
General Conditions	\$ 32,839.65
Escalation	\$ 5,473.28
Contingency	\$ 21,893.10
Contract Administration	\$ 22,330.96
Planning/Design	\$ 27,913.70
Utilities (% of whole)	\$ 14,339.21
Archaeology Mitigation (% of whole)	\$ 150,835.65
HABS Documentation (% of whole)	\$ 24,644.68
Site Improvements (% of whole)	\$ 15,135.23
TOTAL	\$ 534,336.45
O & M estimate for 50 years	\$ 4,144,646.17

Option 3 – Interpretive Center Partnership

Construction Division	Cost Totals
Building Code Compliance	\$ 95,812.00
Building Improvements	\$ 210,942.00
General Conditions	\$ 46,013.10
Escalation	\$ 7,668.85
Contingency	\$ 30,675.40
Contract Administration	\$ 31,288.91
Planning/Design	\$ 39,111.14
Utilities (% of whole)	\$ 21,227.56
Archaeology Mitigation (% of whole)	\$ 122,595.83
HABS Documentation (% of whole)	\$ 20,030.64
Site Improvements (% of whole)	\$ 12,301.57
TOTAL	\$ 637,667.00
<hr/>	
O & M estimate for 50 years	\$ 4,144,646.17

Option 4 – Renovation into GOQs, SOQs, and JNCOQs

Construction Division	Cost Totals
Bldg Renovations & Additions	\$ 65,910.00
Bldg Improvements	\$ 138,515.00
General Conditions	\$ 30,663.75
Escalation	\$ 5,110.63
Contingency	\$ 20,442.50
Contract Administration	\$ 20,851.35
Planning/Design	\$ 26,064.19
Utilities (% of whole)	\$ 112,566.39
Archaeology Mitigation (% of whole)	\$ 203,977.94
HABS Documentation (% of whole)	\$ 26,661.98
TOTAL	\$ 650,763.73
<hr/>	
O & M estimate for 50 years	\$ 4,151,034.61

Option 5 – Renovation into JNCOQs

Construction Division	Cost Totals
Building Renovations and Additions	\$ 30,200.00
Building Improvements	\$ 147,515.00
General Conditions	\$ 26,657.25
Escalation	\$ 4,442.88
Contingency	\$ 17,771.50
Contract Administration	\$ 18,126.93
Planning/Design	\$ 22,658.66
Utilities (% of whole)	\$ 112,566.39
Archaeology Mitigation (% of whole)	\$ 163,182.36
HABS Documentation (% of whole)	\$ 26,661.98
TOTAL	\$ 569,782.94
O & M estimate for 50 years	\$ 4,151,034.61

Option 6 – Maintain Existing Quarters

Construction Division	Cost Totals
Building Improvements	\$ 64,112.00
General Conditions	\$ 9,616.80
Escalation	\$ 1,602.80
Contingency	\$ 6,411.20
Contract Administration	\$ 6,539.42
Planning/Design	\$ 8,174.28
TOTAL	\$ 96,456.50
O & M estimate for 50 years	\$ 4,778,370.33

Option 7 – Mothballing

Construction Division	Cost Totals
Mothballing	\$ 15,290.00
General Conditions	\$ 2,293.50
Escalation	\$ 382.25
Contingency	\$ 1,529.00
Contract Administration	\$ 1,559.58
Planning/Design	\$ 1,949.48
HABS Documentation (% of whole)	\$ 16,765.71
TOTAL	\$ 39,769.52
O & M estimate for 10 years	\$ 81,520.65

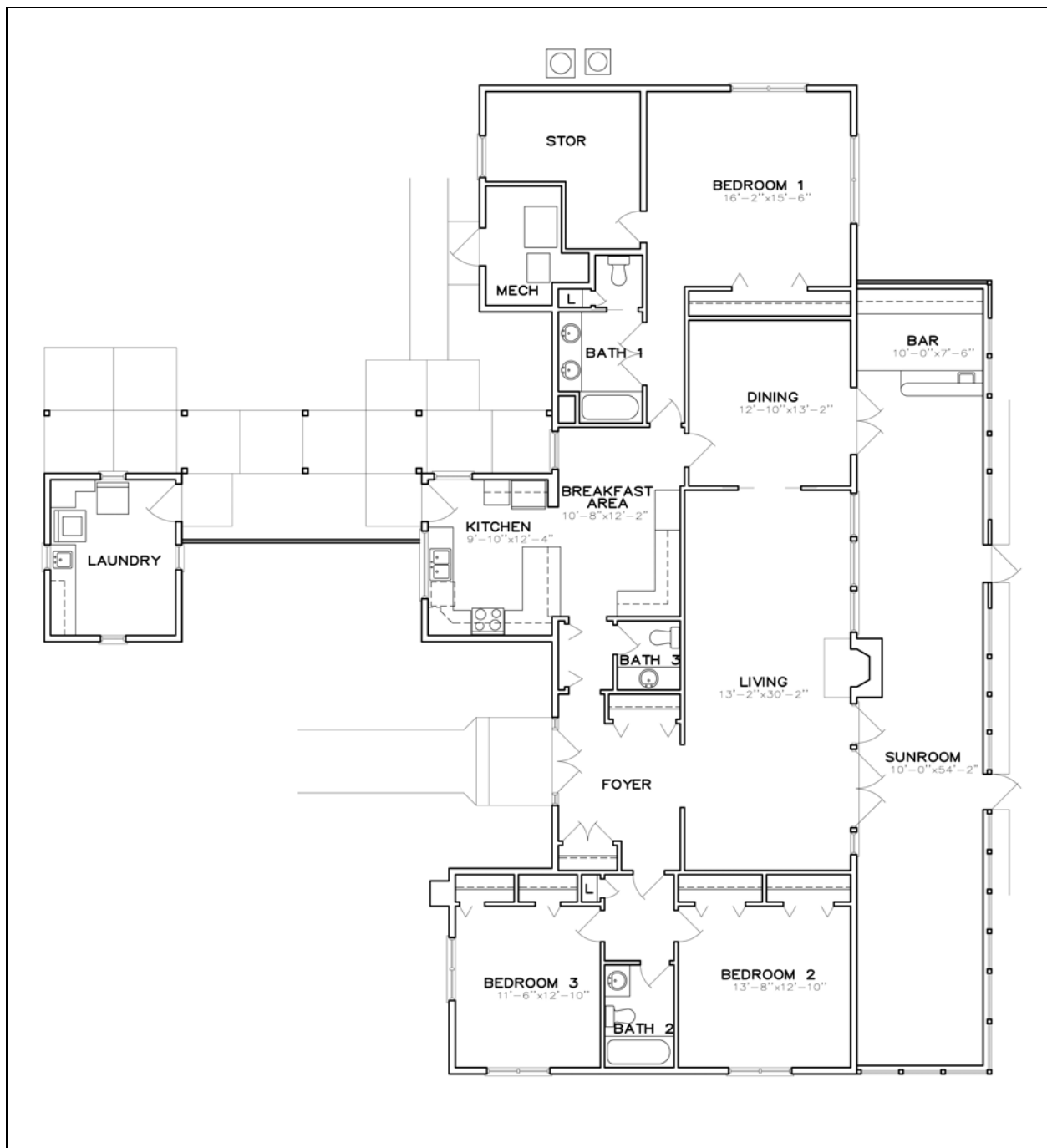
Option 8 – Demolition and New Construction

Construction Division	Cost Totals
Demolition	\$ 29,600.16
General Conditions	\$ 4,440.02
Escalation	\$ 740.00
Contingency	\$ 2,960.02
Contract Administration	\$ 3,019.22
Planning/Design	\$ 3,774.02
Utilities (% of whole)	\$ 70,784.53
Archaeology Mitigation (% of whole)	\$ 307,251.32
HABS Documentation (% of whole)	\$ 16,765.71
Site Improvements (% of whole)	\$ 24,451.05
Cost of New GOQ & 2 SOQs (% of whole)	\$ 263,152.26
TOTAL	\$ 463,786.05
O&M estimate for 50 years (% of whole)	DEMOLISHED

Option 9 – Demolition with Land Converted to a Park

Construction Division	Cost Totals
Demolition	\$ 29,600.16
General Conditions	\$ 4,440.02
Escalation	\$ 740.00
Contingency	\$ 2,960.02
Contract Administration	\$ 3,019.22
Planning/Design	\$ 3,774.02
Archaeology Mitigation (% of whole)	\$ 99,044.75
HABS Documentation (% of whole)	\$ 9,158.45
Site Improvements (% of whole)	\$ 83.72
TOTAL	\$ 152,820.36
O&M estimate for 50 years (% of whole)	DEMOLISHED

Floor Plan



This page intentionally left blank.

Building 1561 – Boathouse



Figure 27 Looking east toward boathouse.

Building History

Building 1561 has undergone numerous reconstructions throughout its history. The current building most likely dates from the 1970s, but the location of the boathouse dates from the 1930s. The 1914 Camp Pinchot map shows a boathouse located off of the point, but aerial photographs from 1935 show the boathouse in its current location, as does a 1938 USGS map.

A composite of treated wood piers makes up the structural system of the boathouse and its boardwalk. The oldest piers are approximately 50 years old and are treated with coal-tar creosote. The remaining piers were treated with creosote or salt. The wood-frame boathouse is clad with corrugated metal siding. The corrugated metal roof has exposed rafters at the eaves. The interior is unfinished.

Historical and Architectural Significance of Building

Building 1561 is one of ten contributing buildings within the Camp Pinchot Historic District. The significance of Building 1561 and Camp Pinchot lies in their association with the establishment and management of the Choctawhatchee National Forest (CNF). The CNF was one of the original eleven national forests created by President Theodore Roosevelt and was the only forest in the southeastern United States.

The boathouse was an integral part of life at Camp Pinchot for the Forest Service and continues to function in a similar fashion for the Air Force. Although the original building does not remain, the boathouse has been in its current location for nearly 75 years.

Existing Conditions

The boathouse was damaged during the 2004 hurricane season and is in fair to poor condition. The observed conditions include:

- Wood piling supports are a composite of coal-tar creosote, creosote, and salt-treated wood.
- Galvanized bolted connections are used at bracing and girders.
- Deck cross bracing does not fully connect with pilings.
- Barnacles have accumulated on salt-treated pilings above high and ebb tide water line.
- Salt treated wood decking has water–dry rot deterioration and loose nail fasteners.
- Salt-treated wood railing has galvanized nail fasteners and lag bolt connections to deck framing.
- Railing exhibits water–dry rot deterioration.
- Railing has only newel posts and lacks balusters.
- Boardwalk lacks support capacity of International Maritime Code (IMC) requirements of 65 lbs/sf live load.
- Railing is below International Building Code (IBC) requirements of 80lbs/sf, horizontal.
- Corrugated metal siding is separated from the structure in some places.
- Boardwalk to boathouse is leaning.



Figure 28 Damaged siding.



Figure 29 Boardwalk to boathouse.

Previous Operation and Maintenance Costs

There were no records that O&M monies were spent on this facility.

Building Occupants and Plans

Building 1561 does not have any occupants. The facility is part of the Eglin Housing Privatization project. The preferred alternative is to leave the boathouse standing for use by the residents of the proposed new GOQ.

Assessment of Use Capacity

Due to hurricane damage, this 816 square foot facility is in poor condition. If the proper repairs were completed, the facility could continue to function as a boathouse for Camp Pinchot residents.

Reasonable Alternatives

Under Air Force occupancy, a practical alternative is continued use of the boathouse as a recreational facility supporting a base complex. With the housing privatization option, a reasonable use is for the developer to use it to continue in its current use to support the developer's requirement to provide recreational opportunities to base personnel. Under the Air Force leasing option, no work is a practical decision. If the Air Force decides to excess the property, a logical alternative is to swap the property in exchange for conservation easements.

Cost Estimates

The following tables show summaries for the various alternatives associated with Building 1561. Detailed breakdowns of each estimate can be found in Appendix A.

Option 1 – Base Recreational Facility

No work is planned on Building 1561 under this option. Estimated O&M costs for Building 1561 over the next 50 years total \$948,912.

Option 2 – Housing Developer Use as Offices

No work is planned for Building 1561 under this option. Long-term O&M costs total \$966,397.

Option 3 – Interpretive Center Partnership

No work is planned for Building 1561 under this option. Building 1561 O&M costs for the next 50 years total \$966,397.

Option 4 – Renovation into GOQs, SOQs, and JNCOQs

No work is planned for Building 1561 under this option. Building 1561 O&M costs for the next 50 years total \$966,397.

Option 5 – Renovation into JNCOQs

No work is planned for Building 1561 under this option. It is estimated that O&M for Building 1561 would cost \$966,397 for the next 50 years under this option.

Option 6 – Maintain Existing Quarters

No work is planned for Building 1561 under this option. O&M costs for the next 50 years is estimated to be \$948,912.

Option 7 – Mothballing

No work is planned for Building 1561 under this option. O&M for 10 years under this option is estimated at \$20,642.

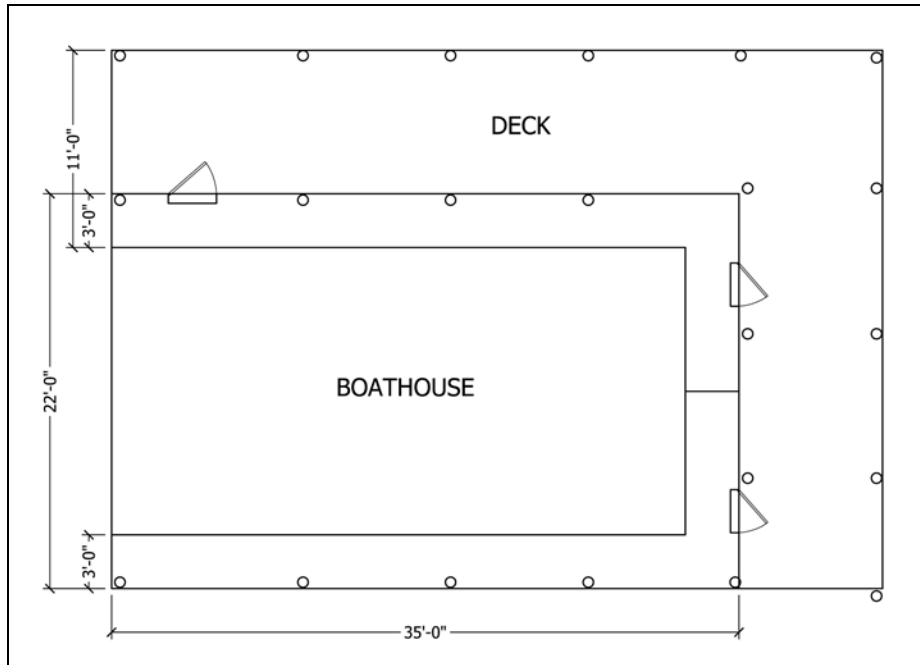
Option 8 – Demolition and New Construction

No work is planned for Building 1561 under this option. Estimated long-term O&M costs total \$1,084,387.

Option 9 – Demolition with Land Converted to a Park

No work is planned for Building 1561 under this option. O&M costs over the next 50 years would total \$484,404.

Floor Plan



This page intentionally left blank.

Building 1562 – Garage



Figure 30 Looking west toward Building 1562.

Building History

Building 1562 is currently located between Buildings 1551 and 1552. In the 1914 Camp Pinchot map, it appears as an unidentified structure behind Residence 1 (Building 1559). The building remained behind Building 1559 until some time after 1935, as the aerial photograph from that year shows an empty spot where Building 1562 is currently located. Building 1562 was most likely not moved to its current location until the early to mid-1970s, as oral interviews revealed that the building was still located behind Building 1559 during the 1950s and 1960s. The building has always been used as a garage.

The one-story timber-framed building sits on a modern poured-concrete slab. The interior yellow pine framing is exposed while the exterior walls are clad in horizontal lap siding. The

facility has an original large sliding wood door suspended on a steel rail system. Windows on the east and west façade are six-light, vertically pivoting.

Historical and Architectural Significance of Building

Building 1562 is one of ten contributing buildings within the Camp Pinchot Historic District. The significance of Building 1562 and Camp Pinchot lies in their association with the establishment and management of the Choctawhatchee National Forest (CNF). The CNF was one of the original eleven national forests created by President Theodore Roosevelt and was the only forest in the southeastern United States.

Building 1562 is one of the original ancillary buildings constructed by the Forest Service at Camp Pinchot. Originally located behind Residence 1 (Building 1559), the facility was moved to its current location in the 1970s. The facility originally served as a garage and currently serves as storage space for the residents of Building 1559.

Existing Conditions

Building 1562 is in good condition. The observed conditions include:

- Peeling paint on horizontal wood siding
- Single-pane painted wood windows
- Original operating sliding garage door
- Gabled roof with asphalt shingles
- Exposed rafters at eaves
- No perimeter guttering
- Exposed framing throughout interior

Previous Operation and Maintenance Costs

There were no records that O&M monies were spent on this facility.

Building Occupants and Plans

The building has no permanent occupants as it is used as a storage facility. The facility is part of the Eglin Housing Privatization project and the preferred alternative is demolition. The preferred alternative does not specify the need or location of a future storage facility.

Assessment of Use Capacity

Building 1562 contains approximately 432 square feet of storage space in one large open area. The facility has a large garage door for easy access and could be reused as a storage space or grounds maintenance equipment. There are no Air Force size standards for grounds maintenance facilities in the Housing Privatization plan.

Reasonable Alternatives

Under Air Force occupancy, a practical alternative is for the building to remain as storage to support a base recreational complex, or to be converted into a small one-bedroom or efficiency recreational cottage. With the housing privatization option, a logical option is to continue as a light maintenance/storage facility. Under the Air Force leasing option, a reasonable use includes conversion into a curation facility in partnership with state and/or federal agencies. If the Air Force decides to excess the property, a practical alternative is to swap the property in exchange for conservation easements.

Cost Estimates

The following tables show summaries for the various alternatives associated with Building 1562. Detailed breakdowns of each estimate can be found in Appendix A.

Option 1 – Base Recreational Facility

Construction Division	Cost Totals
Building Improvements	\$ 36,543.00
General Conditions	\$ 5,481.45
Escalation	\$ 913.58
Contingency	\$ 3,654.30
Contract Administration	\$ 3,727.39
Planning/Design	\$ 4,659.23
Utilities (% of whole)	\$ 1,879.36
TOTAL	\$ 56,858.30
<hr/>	
O & M estimate for 50 years	\$ 532,376.47

Option 2 – Housing Developer Use as Offices

No work is planned for Building 1562 under this option. It is estimated that long-term O&M costs would total \$542,186.

Option 3 – Interpretive Center Partnership

Construction Division	Cost Totals
Building Improvements	\$ 35,960.00
General Conditions	\$ 5,946.00
Escalation	\$ 991.00
Contingency	\$ 3,964.00
Contract Administration	\$ 4,043.28
Planning/Design	\$ 5,054.10
Utilities (% of whole)	\$ 3,015.56
Archaeology Mitigation (% of whole)	\$ 17,415.78
HABS Documentation (% of whole)	\$ 2,845.52
Site Improvements (% of whole)	\$ 1,747.54
TOTAL	\$ 80,982.79
O & M estimate for 50 years	\$ 566,156.68

Option 4 – Renovation into GOQs, SOQs, and JNCOQs

No work is planned for Building 1562 under this option. It is estimated that long-term O&M costs would total \$542,186.

Option 5 – Renovation into JNCOQs

No work is planned for Building 1562 under this option. Estimated O&M costs for the next 50 years total \$542,186.

Option 6 – Maintain Existing Quarters

No work is planned for Building 1562 under this option. Building 1562 would require approximately \$532,376 for long-term O&M costs.

Option 7 – Mothballing

Construction Division	Cost Totals
Mothballing	\$ 16,615.00
General Conditions	\$ 2,492.25
Escalation	\$ 415.38
Contingency	\$ 1,661.50
Contract Administration	\$ 1,694.73
Planning/Design	\$ 2,118.41
HABS Documentation (% of whole)	\$ 2,381.71
TOTAL	\$ 27,378.98
O & M estimate for 10 years	\$ 11,580.70

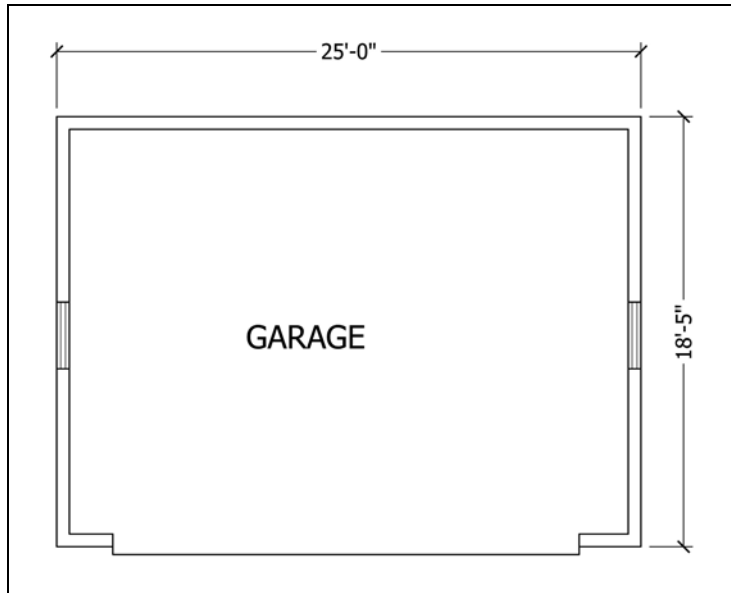
Option 8 – Demolition and New Construction

Construction Division	Cost Totals
Demolition	\$ 4,521.72
General Conditions	\$ 678.26
Escalation	\$ 113.04
Contingency	\$ 452.17
Contract Administration	\$ 461.22
Planning/Design	\$ 576.52
Utilities (% of whole)	\$ 10,055.55
Archaeology Mitigation (% of whole)	\$ 43,647.67
HABS Documentation (% of whole)	\$ 2,381.71
Site Improvements (% of whole)	\$ 3,473.48
Cost of New GOQ & 2 SOQs (% of whole)	\$ 37,383.02
TOTAL	\$ 66,361.34
O&M estimate for 50 years (% of whole)	DEMOLISHED

Option 9 – Demolition with Land Converted to a Park

Construction Division	Cost Totals
Demolition	\$ 4,521.72
General Conditions	\$ 678.26
Escalation	\$ 113.04
Contingency	\$ 452.17
Contract Administration	\$ 461.22
Planning/Design	\$ 576.52
Archaeology Mitigation (% of whole)	\$ 19,879.49
HABS Documentation (% of whole)	\$ 1,838.21
Site Improvements (% of whole)	\$ 16.80
TOTAL	\$ 28,537.43
O&M estimate for 50 years (% of whole)	DEMOLISHED

Floor Plan



Non-Contributing Buildings and Structures – Structure 1550, Building 1564, and Building 1565



Figure 31 Looking north at Building 1564.

History of the Non-Contributing Structures

The tennis court, known as Structure 1550, was completed in 1977. The tennis court is located to the west of Buildings 1553 and 1565 and is surrounded by a chain link fence. The court appears to have been resurfaced some time ago.

Building 1564 is known as a Guest House. Located directly west of Building 1559, the property houses overnight visitors to Building 1559. The structure was constructed in 1950 and has undergone extensive upgrades and interior modifications since then.

Constructed in 1952, Building 1565 is a wellhouse. The flat-roofed concrete masonry unit (cmu) building housed a well and generator that supplied water to the other facilities at Camp Pinchot. The building has changed little since that time as equipment has been upgraded.

Historical and Architectural Significance of the Non-Contributing Buildings and Structures

The three non-contributing buildings and structures have no historical or architectural significance with Camp Pinchot. Each of the facilities were constructed after the period of significance and did not play a role in the development of Camp Pinchot.

Existing Conditions

Structure 1550 appeared to be in fair condition. Building 1565 is a utilitarian structure that is in fair condition. Building 1564 is in good condition; it is well maintained by Eglin as a visiting guest house.

Previous Operation and Maintenance Costs

There were no records that O&M monies were spent on this facility.

Building Occupants and Plans

Structure 1550 is a recreational facility and has no permanent occupants. It is part of the Eglin Housing Privatization plan, and the preferred alternative for the tennis court is demolition. The preferred alternative does not specify the need or location for a tennis court.

Building 1564 is also not permanently occupied. The facility is used on an as-needed basis. It is also part of the Eglin Housing Privatization plan. Demolition is also the preferred alternative. The plan does not call for the construction of a new guest house.

Building 1565 has no personnel stationed in it. The facility currently houses the well and necessary pumps to supply water to the other facilities at Camp Pinchot. The Eglin Housing Privatization plan calls for the installation of new water service and would not require Building 1565.

Assessment of Use Capacity

The tennis court could continue to be used in its current state. Building 1564 does not meet any requirement for permanent family housing, but it could continue to be used as guest quarters. Building 1565 provides adequate space for the Camp Pinchot well and pumps and could continue to be used in this capacity should new water service not be required.

Reasonable Alternatives

Structure 1550: Under Air Force occupancy, a practical alternative for Structure 1550 is to remain a tennis court to support a base recreational complex. With the housing privatization option, an alternative is to continue in its current use to support the developer's requirement to provide recreational opportunities to base personnel. Under the Air Force leasing option, a logical use includes demolition and the construction of a parking lot in its place. If the Air Force decides to excess the property, a rational alternative is to swap the property in exchange for conservation easements.

Building 1564: Under Air Force occupancy, a reasonable alternative for Building 1564 is to use the house as a rental cottage in a base recreational complex. With the housing privatization option, a practical use is for the developer to use it as company offices, possibly leased out to Eglin housing agencies. Under the Air Force leasing option, a sensible use includes conversion into natural and cultural resources offices in partnership with state and/or federal agencies. If the Air Force decides to excess the property, the most practical alternative is to swap the property in exchange for conservation easements.

Building 1565: Under Air Force occupancy, a realistic alternative for Building 1565 is to continue using the well and wellhouse in their current configurations if new utilities are not being installed. If new utilities are installed, Building 1565 could be demolished. With the housing privatization option, a reasonable alternative is to demolish the facility because all new utilities will be installed. Under the Air Force leasing option, the reasonable alternative is to demolish the facility if new utilities are being installed. If the Air Force decides to excess the property, the logical alternative is to swap the property in exchange for conservation easements.

Cost Estimates

The following tables show summaries for the various alternatives associated with the non-contributing buildings and structures. Detailed breakdowns of each estimate can be found in Appendix A.

For all options, a cost estimate is not provided for Structure 1550, a tennis court. Any work that is undertaken to modify the tennis court is detailed in the site improvement line item in the following tables. The site improvement costs are distributed among each of the facilities within that option. See Appendix A for specific work to be completed on Structure 1550.

Option 1 – Base Recreational Facility

No work planned on Building 1564 and Structure 1550 under this option. Long-term O&M costs for Building 1564 are estimated to be \$1,042,628. No O&M costs were calculated for Structure 1550.

Building 1565

Construction Division	Cost Totals
Exterior	\$ 331.25
Mechanical - Plumbing	\$ 450.00
General Conditions	\$ 117.19
Escalation	\$ 19.53
Contingency	\$ 78.13
Contract Administration	\$ 79.69
Planning/Design	\$ 99.61
Utilities (% of whole)	\$ 827.44
TOTAL	\$ 2,002.83
O & M estimate for 50 years	\$ 399,247.04

Option 2 – Housing Developer Use as Offices

Structure 1550 is to be demolished and replaced with a parking lot under this option. The cost of this work is part of the overall site improvements and distributed amongst each building in this option.

Building 1564

Construction Division	Cost Totals
Building Code Compliance	\$ 40,623.00
Building Improvements	\$ 41,206.00
General Conditions	\$ 12,274.35
Escalation	\$ 2,045.73
Contingency	\$ 8,182.90
Contract Administration	\$ 8,346.56
Planning/Design	\$ 10,433.20
Utilities (% of whole)	\$ 3,395.01
Archaeology Mitigation (% of whole)	\$ 35,712.48
HABS Documentation (% of whole)	\$ 5,834.98
Site Improvements (% of whole)	\$ 3,583.48
TOTAL	\$ 171,637.68
O & M estimate for 50 years	\$ 1,049,774.52

Building 1565

Construction Division	Cost Totals
Exterior	\$ 7,742.00
General Conditions	\$ 1,161.30
Escalation	\$ 193.55
Contingency	\$ 774.20
Contract Administration	\$ 619.36
Planning/Design	\$ 774.20
Utilities (% of whole)	\$ 1,494.75
Archaeology Mitigation (% of whole)	\$ 15,723.41
HABS Documentation (% of whole)	\$ 2,569.01
Site Improvements (% of whole)	\$ 1,577.73
TOTAL	\$ 32,629.51
O & M estimate for 50 years	DEMOLISHED

Option 3 – Interpretive Center Partnership

Structure 1550 is to be demolished and replaced with a parking lot under this option. The cost of this work is part of the overall site improvements and distributed amongst each building in this option.

Building 1564

Construction Division	Cost Totals
Building Code Compliance	\$ 40,623.00
Building Improvements	\$ 41,206.00
General Conditions	\$ 12,274.35
Escalation	\$ 2,045.73
Contingency	\$ 8,182.90
Contract Administration	\$ 8,346.56
Planning/Design	\$ 10,433.20
Utilities (% of whole)	\$ 5,025.93
Archaeology Mitigation (% of whole)	\$ 29,026.31
HABS Documentation (% of whole)	\$ 4,742.54
Site Improvements (% of whole)	\$ 2,912.57
TOTAL	\$ 164,819.07
O & M estimate for 50 years	\$ 1,049,774.52

Building 1565

Construction Division	Cost Totals
Demolition	\$ 7,742.00
General Conditions	\$ 1,161.30
Escalation	\$ 193.55
Contingency	\$ 774.20
Contract Administration	\$ 619.36
Planning/Design	\$ 774.20
Utilities (% of whole)	\$ 2,212.80
Archaeology Mitigation (% of whole)	\$ 12,779.64
HABS Documentation (% of whole)	\$ 2,088.03
Site Improvements (% of whole)	\$ 1,282.34
TOTAL	\$ 29,627.43
O & M estimate for 50 years	DEMOLISHED

Option 4 – Renovation into GOQs, SOQs, and JNCOQs

No work is planned for Building 1564 and Structure 1550 under this option. Estimated O&M for the next 50 years on Building 1564 totals \$1,058,977. Long-term O&M costs were not calculated for Structure 1550.

Building 1565

Construction Division	Cost Totals
Demolition	\$ 7,742.00
General Conditions	\$ 1,161.30
Escalation	\$ 193.55
Contingency	\$ 774.20
Contract Administration	\$ 619.36
Planning/Design	\$ 774.20
Utilities (% of whole)	\$ 11,734.15
Archaeology Mitigation (% of whole)	\$ 21,263.07
HABS Documentation (% of whole)	\$ 2,779.30
TOTAL	\$ 47,041.13
O & M estimate for 50 years	DEMOLISHED

Option 5 – Renovation into JNCOQs

No work is planned for Building 1564 and Structure 1550 under this option. Estimated O&M costs for the next 50 years on Building 1564 total \$1,058,977. Long-term O&M costs were not calculated for Structure 1550.

Building 1565

Construction Division	Cost Totals
Demolition	\$ 7,742.00
General Conditions	\$ 1,161.30
Escalation	\$ 193.55
Contingency	\$ 774.20
Contract Administration	\$ 619.36
Planning/Design	\$ 774.20
Utilities (% of whole)	\$ 11,734.15
Archaeology Mitigation (% of whole)	\$ 17,010.46
HABS Documentation (% of whole)	\$ 2,779.30
TOTAL	\$ 42,788.52
O & M estimate for 50 years	DEMOLISHED

Option 6 – Maintain Existing Quarters

Under this option, no work is planned for Buildings 1564 and 1565 and Structure 1550. Estimated O&M costs for the next 50 years on Building 1564 total \$1,207,508. O&M costs for Building 1565 are estimated to be \$399,247. Long-term O&M costs were not calculated for Structure 1550.

Option 7 – Mothballing

No work is planned for Structure 1550 under this option, and long-term O&M costs were not calculated.

Building 1564

Construction Division	Cost Totals
Mothballing	\$ 9,988.75
General Conditions	\$ 1,498.31
Escalation	\$ 249.72
Contingency	\$ 998.88
Contract Administration	\$ 1,018.85
Planning/Design	\$ 1,273.57
HABS Documentation (% of whole)	\$ 3,969.52
TOTAL	\$ 18,997.59
O & M estimate for 10 years	\$ 19,301.17

Building 1565

Construction Division	Cost Totals
Exterior	\$ 331.25
Mechanical - Plumbing	\$ 450.00
General Conditions	\$ 117.19
Escalation	\$ 19.53
Contingency	\$ 78.13
Contract Administration	\$ 79.69
Planning/Design	\$ 99.61
HABS Documentation (% of whole)	\$ 1,747.69
TOTAL	\$ 2,923.08
O & M estimate for 10 years	\$ 8,497.88

Option 8 – Demolition and New Construction

Structure 1550 is to be demolished under this option. The cost of this work is part of the overall site improvements and is distributed among each building in this option. Long-term O&M costs were not calculated for Structure 1550.

Building 1564

Construction Division	Cost Totals
Demolition	\$ 14,622.20
General Conditions	\$ 2,193.33
Escalation	\$ 365.56
Contingency	\$ 1,462.22
Contract Administration	\$ 1,491.46
Planning/Design	\$ 1,864.33
Utilities (% of whole)	\$ 16,759.24
Archaeology Mitigation (% of whole)	\$ 72,746.12
HABS Documentation (% of whole)	\$ 3,969.52
Site Improvements (% of whole)	\$ 5,789.13
Cost of New GOQ & 2 SOQs (% of whole)	\$ 62,305.04
TOTAL	\$ 121,263.12
O&M estimate for 50 years (% of whole)	DEMOLISHED

Building 1565

Construction Division	Cost Totals
Demolition	\$ 7,742.00
General Conditions	\$ 1,161.30
Escalation	\$ 193.55
Contingency	\$ 774.20
Contract Administration	\$ 619.36
Planning/Design	\$ 774.20
Utilities (% of whole)	\$ 7,378.72
Archaeology Mitigation (% of whole)	\$ 32,028.50
HABS Documentation (% of whole)	\$ 1,747.69
Site Improvements (% of whole)	\$ 2,548.83
Cost of New GOQ & 2 SOQs (% of whole)	\$ 256,947.85
TOTAL	\$ 54,968.35
O&M estimate for 50 years (% of whole)	DEMOLISHED

Option 9 – Demolition with Land Converted to a Park

Structure 1550 is to be demolished under this option. The cost of this work is part of the overall site improvements and is distributed amongst each building in this option. O&M costs were not calculated for Building 1550.

Building 1564

Construction Division	Cost Totals
Demolition	\$ 14,622.20
General Conditions	\$ 2,193.33
Escalation	\$ 365.56
Contingency	\$ 1,462.22
Contract Administration	\$ 1,491.46
Planning/Design	\$ 1,864.33
Archaeology Mitigation (% of whole)	\$ 41,682.80
HABS Documentation (% of whole)	\$ 3,854.32
Site Improvements (% of whole)	\$ 35.24
TOTAL	\$ 67,571.45
O&M estimate for 50 years (% of whole)	DEMOLISHED

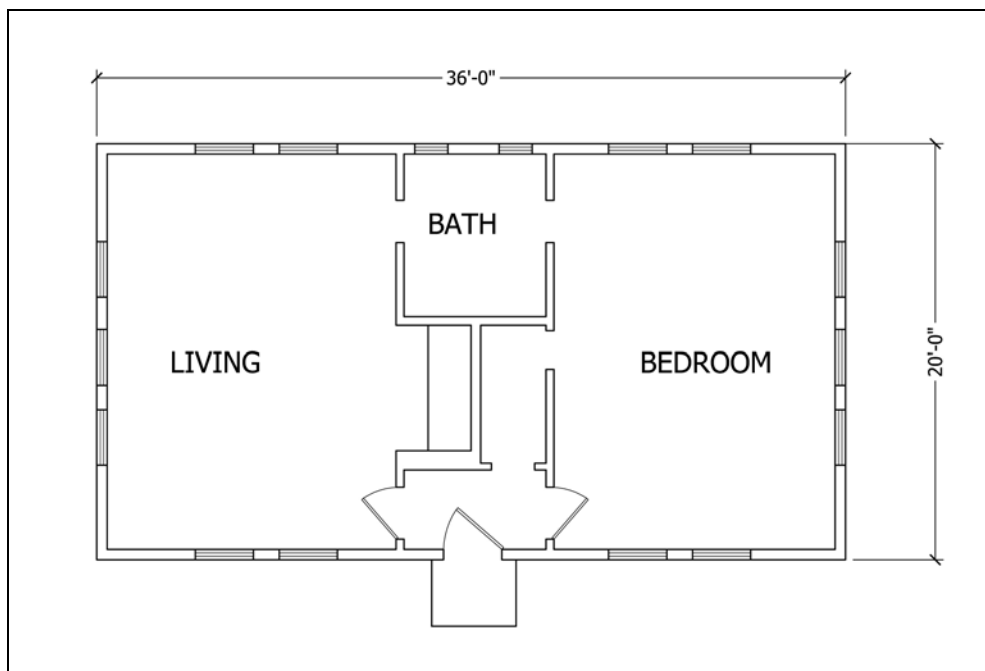
Building 1565

Construction Division	Cost Totals
Demolition	\$ 7,742.00
General Conditions	\$ 1,161.30
Escalation	\$ 193.55
Contingency	\$ 774.20
Contract Administration	\$ 619.36
Planning/Design	\$ 774.20
Archaeology Mitigation (% of whole)	\$ 1,603.18
HABS Documentation (% of whole)	\$ 148.24
Site Improvements (% of whole)	\$ 1.36
TOTAL	\$ 13,017.39
O&M estimate for 50 years (% of whole)	DEMOLISHED

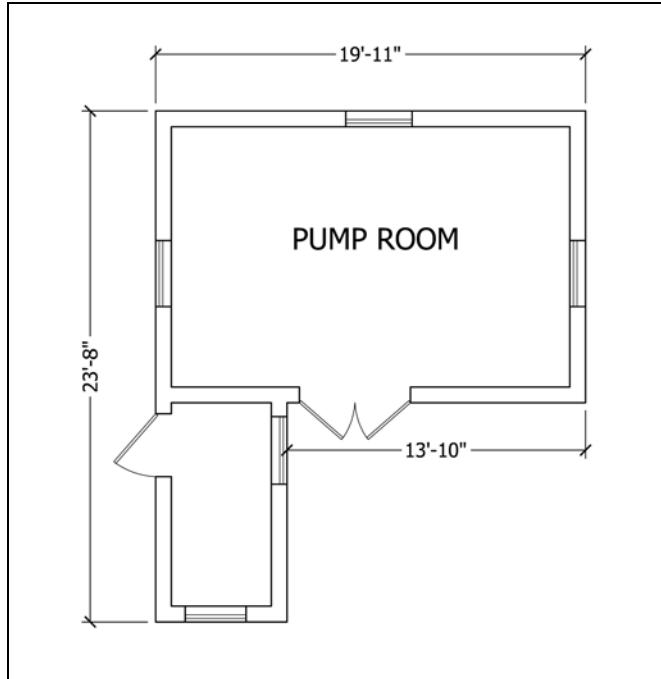
Floor Plan

There are no available floor plans for Structure 1550.

Building 1564 floor plan



Building 1565 floor plan



This page intentionally left blank.

Chapter 5

Conclusions

Conclusions

Between January 2005 and April 2005, Hardlines Design Company (HDC) successfully completed a Case Study/Adaptive Reuse Alternatives Report (Report) for the Camp Pinchot Historic District (CPHD). Eglin Air Force Base, Florida (Eglin), through the Air Force Center for Environmental Excellence (AFCEE), retained the services of HDC to complete this report to support Eglin's requirement under Section 110 of the National Historic Preservation Act (NHPA) of 1966 to "preserve and use" historic properties, to the greatest extent feasible.

Camp Pinchot was listed in the National Register of Historic Places (National Register) in 1998 and consists of ten contributing buildings (Buildings 1551, 1552, 1553, 1555, 1556, 1557, 1558, 1559, 1561, and 1562) and three non-contributing buildings (Buildings 1550, 1564, and 1565). Underlying the buildings are historic and prehistoric archaeological deposits: the historic component of the site is associated with the Forest Service period of occupancy, and the prehistoric component appears to be Late Deptford. The archaeological remains are not distributed over the entire complex; however, the archaeological site 8OK871 underlies the CPHD and was determined in 1999 to be eligible for listing in the National Register for both its historic and prehistoric components.

In order to provide standardized housing for all military members, Eglin is in the process of housing privatization. The privatization effort will demolish sub-standard units and replace them with new up-to-standard units, renovation of some existing to-standard units, and the construction of new units. To support this mission, Eglin is considering the demolition of all but one of the non-contributing buildings in the district in order to support their multi-family demolition, construction, renovation and lease of family housing under Eglin's Housing Privatization Plan.

HDC sent a three-person team to Eglin to complete the fieldwork from February 14th through February 18th of 2005. The team consisted of a Registered Architect, a Preservation Planner, and a Facility Planner. The team investigated the exterior and interior of each facility through two guided tours. They also interviewed various Eglin personnel located in numerous divisions, including Civil Engineering, Cultural Resources, Natural Resources, Real Estate, Security, Legal, Encroachment, Housing, and Services.

Probable actions related to housing privatization in the CPHD have the potential to result in an adverse effect to these properties and the district. The CPHD is nationally significant as a rare remaining example of an intact complex associated with the earliest years of the U.S. Forest Service. Its demolition would cause significant public concern at the federal, state, and local levels. Demolition and new construction would also require the archaeological mitigation of the entire site, which is a significant expense that must be borne by Eglin or the housing privatization developer. This study, therefore, compares alternate use options with demolition.

The purpose of this report is to identify potential alternatives, determine if they could logically be undertaken, and present the pros and cons (the reasonability) of each alternative. The Air Force will use this information in determining the ultimate disposition of the CPHD.

This report identifies several reasonable courses of action that consider and weigh all of the following: economic factors, cost-effective use of public monies, compliance with Federal regulations, stewardship of historic properties, and support of the Eglin mission. These alternatives are categorized by the proponents for the reuses, the cost or anticipated cost of each proposed reuse, how each would be funded/how likely is the funding, source of continual funding, timeframe for implementation, approvals needed to implement, and how each reuse fits into the overall housing privatization plan. Alternatives fall into four overall categories: use by the Air Force, integration into the housing privatization project, lease by another agency, and actual property transfer outside of Air Force control.

A summary of the alternatives is shown in the following table. The table is sorted first by reasonability and then by category. Each category is further sorted by long-term cost. Cost estimates were not provided for alternatives that were not found to be reasonable or for alternatives that would require funding by other agencies.

Table 25. Summary of alternatives sorted by responsibility and long-term costs

Alternative	Category	Proponent	Anticipated Initial Cost	Anticipated Long-Term O&M Costs	Funded By	Fit into Housing Privatization Plan?	Compatible with Family Housing?	O&M Maintenance Funding By:	Multiple Agency Involvement?	Reasonable Timeframe?	Funding Approval Potential	Ongoing Maintenance Funds Potential
Partnership with federal/state agencies (Interpretive Center)	Air Force Leasing	Consulting Parties	\$2,315,116	\$19,573,002	Other Agency & Eglin	No	Yes	96 CEG and other agencies	Yes	Yes	Moderate	Moderate
Non-profit organizations		Consulting Parties	No estimate	No estimate	Non-Profit & Eglin	No	Yes	Non-Profit and/or 96 CEG	Yes	Yes	Moderate	Moderate
Mothballing	Air Force Occupancy	Consulting Parties	\$235,825	\$395,620	96 CEG	No	Temporarily, yes. Long term no.	96 CEG	No	Yes	Low	Low
Demolish with land converted to a park		96 CEG	\$1,202,544	\$9,284,203	96 CEG	Yes, with modifications to current RFP	Yes	96 CEG	No	Yes	High	Moderate
Base recreational facility (Resort Rentals)		Consulting Parties/Hurlburt Field Services	\$993,846	\$19,659,300	Air Force	No	Yes	96 SVS and Hurlburt Services	No	Yes	Moderate	High
Demolish / construct new GOQ and SOQs	Housing Privatization	96 CEG	\$3,392,556	\$18,015,616	Housing Privatization Developer	Yes	Yes	Housing Privatization Developer	No	Yes	High	High
Renovate JNCOQs		Consulting Parties	\$1,678,388	\$19,425,110	Housing Privatization Developer	Yes, with modifications to current RFP	Yes	Housing Privatization Developer	No	Yes	High	High
Renovate as GOQ, SOQ, & JNCOQs		Consulting Parties	\$1,924,229	\$19,425,110	Housing Privatization Developer	Yes, with modifications to current RFP	Yes	Housing Privatization Developer	No	Yes	High	High
Use by Housing Developer		96 CEG/CEHP	\$1,798,606	\$19,451,375	Housing Privatization Developer	Yes, with modifications to current RFP	Yes	Housing Privatization Developer	No	Yes	High	High
Maintain as GOQ, SOQ, CGO, & JNCOQs		Consulting Parties	\$443,430	\$21,603,007	Housing Privatization Developer	Yes, with modifications to current RFP	Yes	Housing Privatization Developer	No	Yes	High	High
Land swap and conservation easements	Non Air-Force	46 TW/CAX & Consulting Parties	No estimate	No estimate	Other Agencies	No	Yes	Other agency or organization	Yes	Yes	High	Moderate
Transfer to U.S. Forest Service		46 TW/CAX & Consulting Parties	No estimate	No estimate	US Forest Service	No	Yes	US Forest Service	Yes	Yes	High	High
Base restaurant	Air Force Occupancy	96 CEG	No estimate	No estimate	96 SVS	No	Yes	96 SVS	No	Yes	Low	Low
Eglin Cultural Res, Natural Res, & Housing Offices		96 CEG/CEH,96 CEG/CEHP, & 96 CEG/CEVS	No estimate	No estimate	96 CEG	No	Yes	96 CEG	No	Yes	Low	Low
Temporary lodging facility (TLF)		96 CEG & 96 SVS	No estimate	No estimate	96 CEG & 96 SVS	No	Yes	96 CEG and 96 SVS	No	Yes	Low	Moderate

This page intentionally left blank.

Chapter 6

Bibliography

Bibliography

- Eglin Air Force Base, AFDTC/EMPH. *Camp Pinchot Historic District*, nomination for National Register of Historic Places, 1995. Florida Historic Preservation Office.
- Eglin Air Force Base. *Draft Eglin Air Force Base Family Housing Master Plan 2004*. October 2003. On file at Eglin AFB, Housing Office, Okaloosa County, Florida.
- Eglin Air Force Base. *Eglin Air Force Base General Plan—Main Base and Duke Field*. Date unknown. On file at Eglin AFB, Civil Engineering, Okaloosa County, Florida.
- Eglin Air Force Base. "Eglin Air Force Base History." <http://www.eglin.af.mil/history.htm>
- Eglin Air Force Base. *General Officer Quarters Master Plan, Individual Facility Profile, Quarters 1556*. October 2001. On file at Eglin AFB, Housing Office, Okaloosa County, Florida.
- Eglin Air Force Base. *General Officer Quarters Master Plan, Individual Facility Profile, Quarters 1559*. October 2001. On file at Eglin AFB, Housing Office, Okaloosa County, Florida.
- Eglin Air Force Base. *Housing Community Profile Plan (HCP)*. January 2005. On file at Eglin AFB, Housing Office, Okaloosa County, Florida.
- Eglin Air Force Base and Hurlburt Field. Eglin/Hurlburt Housing Privatization Website. http://www.eglin.af.mil/Housing_Privatization/index.shtml
- Hardlines Design Company. Interviews, 2005. See page 158 of this report for details.
- Jones Lang LaSalle. *Privatization of Military Family Housing, Hurlburt Field and Eglin Air Force Base, Solicitation No. AFCEE-04-0004, Request for Proposal*. September 14, 2004. On file at Eglin AFB, Housing Office, Okaloosa County, Florida.
- New South Associates. *Draft Historic American Building Survey, Camp Pinchot, Eglin Air Force Base, Okaloosa County, Florida*. December 2004. On file at Eglin AFB, Cultural Resources Management, Okaloosa County, Florida.
- Parsons. *Housing Community Profile Eglin Air Force Base, Valparaiso, Florida*. January 2005. On file at Eglin AFB, Housing Office, Okaloosa County, Florida.
- Prentice Thomas & Associates, Inc. *Final Multiple Cultural Resources Investigations for Architect-Engineering (A-E) Service for Cultural Resources Work in Support of the Lease, Demolition, and Construction of Military Family Housing for Eglin AFB and Hurlburt Field, FL*. January 2005. On file at Eglin AFB, Housing Office, Okaloosa County, Florida.
- Public Law 437, 76th Congress, 3rd Session. June 27, 1940.

Secretary of the Air Force. *Family Housing Planning, Programming, Design, and Construction*, Air Force Instruction 32-6002, Law, 27 May 1997. (Available at AFDPO website at <http://www.e-publishing.af.mil>)

Secretary of the Air Force. *Gifts to the Department of the Air Force*, Air Force Instruction 51-601, Law, 26 November 2003. (Available at AFDPO website at <http://www.e-publishing.af.mil>)

Secretary of the Air Force. *Privatized Family Housing*, Draft Air Force Instruction 32-6007, Law, 2004. (Available at AFDPO website at <http://www.e-publishing.af.mil>)

Secretary of the Air Force. *US Air Force Family Housing Guide for Planning, Programming, Design, and Construction*. August 2004. (Available at AFCEE website at <http://www.afcee.brooks.af.mil/dc/dch/mfhguide/guide.asp>)

Interviews

For this project, HDC conducted numerous interviews with representatives of Eglin Air Force Base, Hurlburt Field, Air Force Center for Environmental Excellence, and Air Force Materiel Command, as well as additional consulting parties, all of which are listed below. All interviews were led by HDC personnel Charissa Wang (registered architect) and/or Stan Popovich (preservation planner), and all were conducted between February 14 and March 8 of 2005, either during fieldwork at Eglin or over the telephone once fieldwork was completed. The meeting notes from each interview are on file at HDC.

Eglin Air Force Base

- Paula Denson, Services
- Donald Cox, Services
- Mike Clark, 96 CEG
- Jane Barnes, 96 CEG
- Sam Morgan, 96 CEG
- Bobby Burns, 96 CEG
- John Gustafson, 96 CEG
- Lorie Caison, Real Estate
- Daryl Sigur, Housing Programs
- Sgt. Reinhard Valleau, Pest Management Shop
- Nick Barber, Water Utilities
- Howard Baldwin, Electrical Shop
- Jeff Kibe, Electrical Shop
- Clifford Howard, Range Management
- Kathy Lawhon, Housing Privatization
- Cathy Windsor, AAC Growth and Development Office
- Chris Smith, AAC Growth and Development Office
- Sgt. Travis Sailor, Installation Security
- MSgt. Robert Harknett, Installation Security
- Tom Harmon, Temporary Lodging Facilities

Brian Brown, Encroachment Committee
Neil Howard, Hurlburt Field Services
Vickie Preacher, Environmental Management
Dan Nichols, Stewardship Branch
Maria Rodriguez, Cultural Resources
Mark Stanley, Cultural Resources
Mrs. Robert Chedister, Occupant of Building 1559
Col. Edmond Keith, 96 CEG

Air Force Center for Environmental Excellence

Col. William Macon, Housing Privatization

Air Force Materiel Command

Jerry Brabant, Housing Privatization

Consulting Parties

Laura Kammerer, Florida Historic Preservation Office
Kathleen Kauffman, Florida Trust for Historic Preservation
Dr. Tom McCulloch, Advisory Council on Historic Preservation
Elizabeth Merritt, National Trust for Historic Preservation
Kate Myers, National Trust for Historic Preservation
Rhonda Kimbrough, United States Forest Service
Denise Rains, United States Forest Service
Mary Ruffin Hanbury, National Trust for Historic Preservation

This page intentionally left blank.

Appendix A Cost Estimates

Options

Option 1 – Base Recreational Facility	A-5
Option 2 – Housing Developer Use as Offices.....	A-15
Option 3 – Interpretive Center Partnership.....	A-25
Option 4 – Renovation into GOQs, SOQs, and JNCOQs.....	A-39
Option 5 – Renovation into JNCOQs	A-47
Option 6 – Maintain Existing Quarters.....	A-55
Option 7 – Mothballing.....	A-61
Option 8 – Demolition and New Construction	A-69
Option 9 – Demolition with Land Converted to a Park.....	A-81

This page intentionally left blank.

Option 1 – Base Recreational Facility

RECREATION LODGING FACILITY SUMMARY

Bldg 1551	\$	89,679.86
Bldg 1552		No Work
Bldg 1553		No Work
Bldg 1555	\$	174,763.47
Bldg 1556	\$	193,079.26
Bldg 1557	\$	148,837.55
Bldg 1558	\$	148,534.02
Bldg 1559	\$	150,467.30
Bldg 1561		No Work
Bldg 1562	\$	54,978.94
Bldg 1564		No Work
Bldg 1565	\$	1,175.39
Utilities	\$	32,330.20
Archaeology		No Work
HABS Documentation		No Work
Site Improvements		No Work
TOTAL	\$	993,846.00
O&M ESTIMATE FOR 50 YEARS	\$	19,659,299.97

BUILDING 1551

Total Gross Square Footage

800

	Total Units	Units	Cost Per Unit		Total
BUILDING IMPROVEMENTS					
Exterior					
Replace roofing	1150	SF	\$	1.85	\$ 2,127.50
Painting	1550	SF	\$	1.25	\$ 1,937.50
Replace damaged wall framing	820	SF	\$	8.00	\$ 6,560.00
Replace damaged wood siding	820	SF	\$	7.00	\$ 5,740.00
Wall cavity fiberglass insulation	1600	SF	\$	5.33	\$ 8,528.00
Remove overhead doors	3	EA	\$	100.00	\$ 300.00
Enclose overhead door opening	215	SF	\$	5.65	\$ 1,214.75
Install new entrance door	1	EA	\$	1,800.00	\$ 1,800.00
Pest extermination	1	LS	\$	3,000.00	\$ 3,000.00
Interior					
Interior finishes	1	LS	\$	9,800.00	\$ 9,800.00
New bathroom, inc. fixtures & plumbing	1	LS	\$	3,800.00	\$ 3,800.00
Install new heating/AC system	1	LS	\$	3,800.00	\$ 3,800.00
Power distribution	1	LS	\$	2,400.00	\$ 2,400.00
Lighting	1	LS	\$	1,600.00	\$ 1,600.00
Furnishings	1	LS	\$	7,000.00	\$ 7,000.00
TOTAL BUILDING IMPROVEMENTS					\$ 59,607.75
GENERAL CONDITIONS					
General Conditions	1	LS	15%	\$	8,941.16
Escalation	1	LS	2.50%	\$	1,490.19
Contingency	1	LS	10%	\$	5,960.78
Contract Administration	1	LS	8%	\$	6,079.99
Planning/Design	1	LS	10%	\$	7,599.99
TOTAL GENERAL CONDITIONS					\$ 30,072.11
TOTAL RENOVATION INTO RECREATIONAL LODGING					\$ 89,679.86
O&M Estimate for 50 years					\$ 985,882.36

BUILDING 1555

Total Gross Square Footage

960

	Total Units	Units	Cost Per Unit	Total
BUILDING CODE COMPLIANCE				
Building Entrance Accessibility				
Remove existing steps/stoop	8	CF	\$ 44.00	\$ 352.00
Exterior entry accessibility ramp	3	CY	\$ 285.00	\$ 855.00
Exterior entry accessibility ramp railing	16	LF	\$ 22.00	\$ 352.00
Exterior egress door/frame/hardware	3	EA	\$ 2,200.00	\$ 6,600.00
Interior egress door/frame/hardware	3	EA	\$ 1,800.00	\$ 5,400.00
TOTAL BUILDING CODE COMPLIANCE				\$ 13,559.00
BUILDING IMPROVEMENTS				
Exterior				
Replace roofing	800	SF	\$ 1.85	\$ 1,480.00
Painting	2150	SF	\$ 1.25	\$ 2,687.50
Replace wall framing	1200	SF	\$ 8.00	\$ 9,600.00
Replace wood siding	1200	SF	\$ 7.00	\$ 8,400.00
Pest extermination	1	LS	\$ 3,000.00	\$ 3,000.00
Interior				
Plaster repairs	420	SF	\$ 11.20	\$ 4,704.00
Paint previously painted surfaces	1	LS	\$ 9,200.00	\$ 9,200.00
Furnishings	1	LS	\$ 14,680.00	\$ 14,680.00
Structural				
Reconstruct exterior wood stairs	17	Riser	\$ 300.00	\$ 5,100.00
Remove & replace loft door w/new	1	LS	\$ 5,150.00	\$ 5,150.00
Bathrooms				
Remove existing fixtures	1	LS	\$ 1,400.00	\$ 1,400.00
New fixtures	1	LS	\$ 6,800.00	\$ 6,800.00
New accessories	1	LS	\$ 2,200.00	\$ 2,200.00
New plumbing	1	LS	\$ 4,400.00	\$ 4,400.00
New electrical	1	LS	\$ 1,800.00	\$ 1,800.00
HVAC system	1	LS	\$ 22,000.00	\$ 22,000.00
TOTAL BUILDING IMPROVEMENTS				\$ 102,601.50
GENERAL CONDITIONS				
General Conditions	1	LS	15%	\$ 17,424.08
Escalation	1	LS	2.50%	\$ 2,904.01
Contingency	1	LS	10%	\$ 11,616.05
Contract Administration	1	LS	8%	\$ 11,848.37
Planning/Design	1	LS	10%	\$ 14,810.46
TOTAL GENERAL CONDITIONS				\$ 58,602.97
TOTAL RENOVATION INTO RECREATIONAL LODGING				\$ 174,763.47
O&M Estimate for 50 years				\$ 1,342,544.83

BUILDING 1556

Total Gross Square Footage 2,483

	Total Units	Units	Cost Per Unit	Total
BUILDING CODE COMPLIANCE				
Building Entrance Accessibility				
Remove existing steps/stoop	90	CF	\$ 44.00	\$ 3,960.00
Exterior entry accessibility ramp	6	CY	\$ 285.00	\$ 1,710.00
Exterior entry accessibility ramp railing	30	LF	\$ 22.00	\$ 660.00
Exterior egress door/frame/hardware	3	EA	\$ 2,200.00	\$ 6,600.00
Interior egress door/frame/hardware	1	EA	\$ 1,800.00	\$ 1,800.00
TOTAL BUILDING CODE COMPLIANCE				\$ 14,730.00

BUILDING IMPROVEMENTS**Exterior**

Replace roofing	2500	SF	\$ 1.85	\$ 4,625.00
Painting	2550	SF	\$ 1.25	\$ 3,187.50
Replace damaged wall framing	1075	SF	\$ 8.00	\$ 8,600.00
Replace damaged wood siding	1075	SF	\$ 7.00	\$ 7,525.00
New double-hung aluminum windows	30	EA	\$ 1,200.00	\$ 36,000.00
New exterior metal door/frame	5	EA	\$ 1,800.00	\$ 9,000.00
Wall cavity fiberglass insulation	2100	SF	\$ 5.33	\$ 11,193.00
Repair brick masonry chimney	260	SF	\$ 6.10	\$ 1,586.00
Pest extermination	1	LS	\$ 3,000.00	\$ 3,000.00

Interior

Plaster repairs	200	SF	\$ 11.20	\$ 2,240.00
Paint previously painted surfaces	1	LS	\$ 7,400.00	\$ 7,400.00
Furnishings	1	LS	\$ 19,248.00	\$ 19,248.00

TOTAL BUILDING IMPROVEMENTS \$ 113,604.50**GENERAL CONDITIONS**

General Conditions	1	LS	15%	\$ 19,250.18
Escalation	1	LS	2.50%	\$ 3,208.36
Contingency	1	LS	10%	\$ 12,833.45
Contract Administration	1	LS	8%	\$ 13,090.12
Planning/Design	1	LS	10%	\$ 16,362.65

TOTAL GENERAL CONDITIONS \$ 64,744.76**TOTAL RENOVATION INTO RECREATIONAL LODGING \$ 193,079.26****O&M Estimate for 50 years \$ 3,376,804.99**

BUILDING 1557

Total Gross Square Footage 1,545

	Total Units	Units	Cost Per Unit	Total
BUILDING CODE COMPLIANCE				
Entry Accessibility				
Remove existing steps/stoop	90	CF	\$ 44.00	\$ 3,960.00
Exterior entry accessibility ramp	6.75	CY	\$ 285.00	\$ 1,923.75
Exterior entry accessibility ramp railing	35	LF	\$ 22.00	\$ 770.00
Exterior egress door/frame/hardware	3	EA	\$ 2,200.00	\$ 6,600.00
Replace interior door hardware	12	EA	\$ 500.00	\$ 6,000.00
TOTAL BUILDING CODE COMPLIANCE				\$ 19,253.75
BUILDING IMPROVEMENTS				
Exterior				
Replace roofing	1700	SF	\$ 1.85	\$ 3,145.00
Painting	1550	SF	\$ 1.25	\$ 1,937.50
Replace wall framing	820	SF	\$ 8.00	\$ 6,560.00
Replace wood siding	820	SF	\$ 7.00	\$ 5,740.00
New double-hung aluminum windows	22	EA	\$ 1,200.00	\$ 26,400.00
New exterior metal door/frame	2	EA	\$ 1,800.00	\$ 3,600.00
Wall cavity fiberglass insulation	1600	SF	\$ 5.33	\$ 8,528.00
Pest extermination	1	LS	\$ 3,000.00	\$ 3,000.00
Interior				
Plaster repairs	100	SF	\$ 11.20	\$ 1,120.00
Paint previously painted surfaces	1	LS	\$ 6,500.00	\$ 6,500.00
Furnishings	1	LS	\$ 13,144.00	\$ 13,144.00
TOTAL BUILDING IMPROVEMENTS				\$ 79,674.50
GENERAL CONDITIONS				
General Conditions	1	LS	15%	\$ 14,839.24
Escalation	1	LS	2.50%	\$ 2,473.21
Contingency	1	LS	10%	\$ 9,892.83
Contract Administration	1	LS	8%	\$ 10,090.68
Planning/Design	1	LS	10%	\$ 12,613.35
TOTAL GENERAL CONDITIONS				\$ 49,909.30
TOTAL RENOVATION INTO RECREATIONAL LODGING				\$ 148,837.55
O&M Estimate for 50 years				\$ 2,138,314.20

BUILDING 1558

Total Gross Square Footage 1,410

	Total Units	Units	Cost Per Unit	Total
BUILDING CODE COMPLIANCE				
Building Entrance Accessibility				
Remove existing steps/stoop	82	CF	\$ 44.00	\$ 3,608.00
Exterior entry accessibility ramp	5.9	CY	\$ 285.00	\$ 1,681.50
Exterior entry accessibility ramp railing	34	LF	\$ 22.00	\$ 748.00
Exterior egress door/frame/hardware	3	EA	\$ 2,200.00	\$ 6,600.00
Replace interior door hardware	10	EA	\$ 500.00	\$ 5,000.00
TOTAL BUILDING CODE COMPLIANCE				\$ 17,637.50
BUILDING IMPROVEMENTS				
Exterior				
Replace roofing	1700	SF	\$ 1.85	\$ 3,145.00
Painting	2000	SF	\$ 1.25	\$ 2,500.00
Replace damaged wall framing	1000	SF	\$ 8.00	\$ 8,000.00
Replace damaged wood siding	1000	SF	\$ 7.00	\$ 7,000.00
New double-hung aluminum windows	24	EA	\$ 1,200.00	\$ 28,800.00
Wall cavity fiberglass insulation	2000	SF	\$ 5.33	\$ 10,660.00
Pest extermination	1	LS	\$ 3,000.00	\$ 3,000.00
Interior				
Plaster repairs	110	SF	\$ 11.20	\$ 1,232.00
Paint all previously painted surfaces	1	LS	\$ 5,400.00	\$ 5,400.00
Furnishings	1	LS	\$ 11,352.00	\$ 11,352.00
Total Building Improvements - Interior				\$ 81,089.00
GENERAL CONDITIONS				
General Conditions	1	LS	15%	\$ 14,808.98
Escalation	1	LS	2.50%	\$ 2,468.16
Contingency	1	LS	10%	\$ 9,872.65
Contract Administration	1	LS	8%	\$ 10,070.10
Planning/Design	1	LS	10%	\$ 12,587.63
TOTAL GENERAL CONDITIONS				\$ 49,807.52
TOTAL RENOVATION INTO RECREATIONAL LODGING				\$ 148,534.02
O&M Estimate for 50 years				\$ 1,914,617.46

BUILDING 1559

Total Gross Square Footage 3,041

	Total Units	Units	Cost Per Unit	Total
BUILDING CODE COMPLIANCE				
Entry Accessibility				
Remove existing steps/stoop	60	CF	\$ 44.00	\$ 2,640.00
Exterior entry accessibility ramp	5.9	CY	\$ 285.00	\$ 1,681.50
Exterior entry accessibility ramp railing	34	LF	\$ 22.00	\$ 748.00
Exterior egress door/frame/hardware	5	EA	\$ 2,200.00	\$ 11,000.00
Raise porch & laundry floor	172	SF	\$ 55.00	\$ 9,460.00
Replace interior door hardware	14	EA	\$ 500.00	\$ 7,000.00
Expand hallway width to 44"	65	SF	\$ 23.50	\$ 1,527.50
Fire-Resistance Rated Construction				
Mechanical room walls & ceiling	335	SF	\$ 5.50	\$ 1,842.50
TOTAL BUILDING CODE COMPLIANCE				\$ 35,899.50

BUILDING IMPROVEMENTS

Exterior				
Replace roofing, cornice, guttering	3200	SF	\$ 3.75	\$ 12,000.00
Attic insulation	3100	SF	\$ 0.89	\$ 2,759.00
Painting	2000	SF	\$ 1.25	\$ 2,500.00
Replace wall framing	1600	SF	\$ 8.00	\$ 12,800.00
Replace wood siding	1600	SF	\$ 7.00	\$ 11,200.00
New double-hung aluminum windows	24	EA	\$ 1,200.00	\$ 28,800.00
Wall cavity fiberglass insulation	2000	SF	\$ 5.33	\$ 10,660.00
Pest extermination	1	LS	\$ 3,000.00	\$ 3,000.00
Interior				
Plaster repairs	125	SF	\$ 11.20	\$ 1,400.00
Paint all previously painted surfaces	1	LS	\$ 38,000.00	\$ 38,000.00
Furnishings	1	LS	\$ 24,712.00	\$ 24,712.00
TOTAL BUILDING IMPROVEMENTS				\$ 64,112.00

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$ 15,001.73
Escalation	1	LS	2.50%	\$ 2,500.29
Contingency	1	LS	10%	\$ 10,001.15
Contract Administration	1	LS	8%	\$ 10,201.17
Planning/Design	1	LS	10%	\$ 12,751.47
TOTAL GENERAL CONDITIONS				\$ 50,455.80

TOTAL RENOVATION INTO RECREATIONAL LODGING \$ 150,467.30**O&M Estimate for 50 years \$ 4,081,979.43**

BUILDING 1562

Total Gross Square Footage 432

	Total Units	Units	Cost Per Unit	Total
BUILDING IMPROVEMENTS				
Exterior				
Replace roofing	800	SF	\$ 1.85	\$ 1,480.00
Painting	2150	SF	\$ 1.25	\$ 2,687.50
Replace damaged wall framing	310	SF	\$ 8.00	\$ 2,480.00
Replace damaged wood siding	310	SF	\$ 7.00	\$ 2,170.00
Pest extermination	1	LS	\$ 2,400.00	\$ 2,400.00
Remove sliding door	1	EA	\$ 250.00	\$ 250.00
Enclose overhead door opening	70	SF	\$ 5.65	\$ 395.50
Install new entrance door	1	EA	\$ 1,800.00	\$ 1,800.00
Interior				
Interior finishes	1	LS	\$ 7,800.00	\$ 7,800.00
New bathroom, inc. fixtures & plumbing	1	LS	\$ 3,800.00	\$ 3,800.00
Install new heating/AC system	1	LS	\$ 2,450.00	\$ 2,450.00
Power distribution	1	LS	\$ 1,650.00	\$ 1,650.00
Lighting	1	LS	\$ 980.00	\$ 980.00
Furnishing	1	LS	\$ 6,200.00	\$ 6,200.00
Total Building Improvements				\$ 36,543.00
GENERAL CONDITIONS				
General Conditions	1	LS	15%	\$ 5,481.45
Escalation	1	LS	2.50%	\$ 913.58
Contingency	1	LS	10%	\$ 3,654.30
Contract Administration	1	LS	8%	\$ 3,727.39
Planning/Design	1	LS	10%	\$ 4,659.23
TOTAL GENERAL CONDITIONS				\$ 18,435.94
TOTAL RENOVATION INTO RECREATIONAL LODGING				\$ 54,978.94
O&M Estimate for 50 years				\$ 532,376.47

BUILDING 1565

Total Gross Square Footage 317

	Total Units	Units	Cost Per Unit	Total
EXTERIOR				
Paint previously painted surfaces	265	SF	\$ 1.25	\$ 331.25
TOTAL EXTERIOR				\$ 331.25
MECHANICAL - PLUMBING				
Drain all piping and disconnect pumps	1	LS	\$ 450.00	\$ 450.00
TOTAL MECHANICAL - PLUMBING				\$ 450.00
GENERAL CONDITIONS				
General Conditions	1	LS	15%	\$ 117.19
Escalation	1	LS	2.50%	\$ 19.53
Contingency	1	LS	10%	\$ 78.13
Contract Administration	1	LS	8%	\$ 79.69
Planning/Design	1	LS	10%	\$ 99.61
TOTAL GENERAL CONDITIONS				\$ 394.14
TOTAL RENOVATION INTO RECREATIONAL LODGING				\$ 1,175.39
O&M Estimate for 50 years				\$ 399,247.04

SITE UTILITIES

	Total Units	Units	Cost Per Unit	Total
SITEWORK				
Remove power poles	18	EA	\$ 120.00	\$ 2,160.00
Remove exist overhead	120	LF	\$ 89.00	\$ 10,680.00
Remove transformer	1	EA	\$ 2,500.00	\$ 2,500.00
TOTAL SITEWORK				\$ 2,709.00
ELECTRICAL				
Install new power poles, 14" dia	22	EA	\$ 280.00	\$ 6,160.00
Install new electrical conductors	1	LS	\$ 6,500.00	\$ 6,500.00
Provide new pole transformer	1	LS	\$ 12,000.00	\$ 12,000.00
TOTAL ELECTRICAL				\$ 18,780.00
GENERAL CONDITIONS				
General Conditions	1	LS	15%	\$ 3,223.35
Escalation	1	LS	2.50%	\$ 537.23
Contingency	1	LS	10%	\$ 2,148.90
Contract Administration	1	LS	8%	\$ 2,191.88
Planning/Design	1	LS	10%	\$ 2,739.85
TOTAL GENERAL CONDITIONS				\$ 10,841.20
TOTAL				\$ 32,330.20

Option 2 – Housing Developer Use as Offices

OFFICE FACILITIES SUMMARY

Bldg 1551	No Work
Bldg 1552	No Work
Bldg 1553	No Work
Bldg 1555	No Work
Bldg 1556	\$ 250,054.67
Bldg 1557	\$ 214,254.72
Bldg 1558	\$ 229,187.26
Bldg 1559	\$ 329,381.69
Bldg 1561	No Work
Bldg 1562	No Work
Bldg 1564	\$ 123,111.73
Bldg 1565	\$ 11,264.61
Site Utilities	\$ 44,870.75
Archaeology	\$ 472,000.00
HABS Documentation	\$ 77,118.96
Site Improvements	\$ 47,361.66
TOTAL	\$ 1,798,606.04
O&M ESTIMATE FOR 50 YEARS	\$ 19,451,374.83

BUILDING 1556

Total Gross Square Footage 2,483

	Total Units	Units	Cost Per Unit	Total
BUILDING CODE COMPLIANCE				
Entry Accessibility				
Remove existing steps/stoop	90	CF	\$ 44.00	\$ 3,960.00
Exterior entry accessibility ramp	6	CY	\$ 285.00	\$ 1,710.00
Exterior entry accessibility ramp railing	30	LF	\$ 22.00	\$ 660.00
Exterior egress door/frame/hardware	3	EA	\$ 2,200.00	\$ 6,600.00
Interior egress door/frame/hardware	1	EA	\$ 1,800.00	\$ 1,800.00
Restroom Accessibility				
Remove existing fixtures	1	LS	\$ 1,400.00	\$ 1,400.00
New fixtures	1	LS	\$ 3,400.00	\$ 3,400.00
New accessories	1	LS	\$ 1,100.00	\$ 1,100.00
New plumbing	1	LS	\$ 2,200.00	\$ 2,200.00
New electrical	1	LS	\$ 600.00	\$ 600.00
Structural				
Increase floor live load capacity	2406	SF	\$ 18.00	\$ 43,308.00
TOTAL BUILDING CODE COMPLIANCE				\$ 66,738.00

BUILDING IMPROVEMENTS

Exterior				
Replace roofing	2500	SF	\$ 1.85	\$ 4,625.00
Painting	2550	SF	\$ 1.25	\$ 3,187.50
Replace damaged wall framing	1075	SF	\$ 8.00	\$ 8,600.00
Replace damaged wood siding	1075	SF	\$ 7.00	\$ 7,525.00
New double-hung aluminum windows	30	EA	\$ 1,200.00	\$ 36,000.00
New exterior metal door/frame	5	EA	\$ 1,800.00	\$ 9,000.00
Wall cavity fiberglass insulation	2100	SF	\$ 5.33	\$ 11,193.00
Repair brick masonry chimney	260	SF	\$ 6.10	\$ 1,586.00
Pest extermination	1	LS	\$ 3,000.00	\$ 3,000.00
Interior				
Plaster repairs	200	SF	\$ 11.20	\$ 2,240.00
Paint previously painted surfaces	1	LS	\$ 7,400.00	\$ 7,400.00
Replace kitchen casework	14	LF	\$ 365.00	\$ 5,110.00
TOTAL BUILDING IMPROVEMENTS				\$ 99,466.50

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$ 24,930.68
Escalation	1	LS	2.50%	\$ 4,155.11
Contingency	1	LS	10%	\$ 16,620.45
Contract Administration	1	LS	8%	\$ 16,952.86
Planning/Design	1	LS	10%	\$ 21,191.07
TOTAL GENERAL CONDITIONS				\$ 83,850.17

TOTAL RENOVATION INTO OFFICES \$ 250,054.67**O&M Estimate for 50 years \$ 250,054.67**

BUILDING 1557

Total Gross Square Footage 1,545

	Total Units	Units	Cost Per Unit	Total
BUILDING CODE COMPLIANCE				
Entry Accessibility				
Remove existing steps/stoop	90	CF	\$ 44.00	\$ 3,960
Exterior entry accessibility ramp	6.75	CY	\$ 285.00	\$ 1,924
Exterior entry accessibility ramp railing	35	LF	\$ 22.00	\$ 770
Exterior egress door/frame/hardware	3	EA	\$ 2,200.00	\$ 6,600
Interior egress door/frame/hardware	1	EA	\$ 1,800.00	\$ 1,800
Raise porch & laundry floor	315	SF	\$ 55.00	\$ 17,325
Replace interior door hardware	12	EA	\$ 500.00	\$ 6,000
Restroom Accessibility				
Remove existing fixtures	1	LS	\$ 1,400.00	\$ 1,400
New fixtures	1	LS	\$ 3,400.00	\$ 3,400
New accessories	1	LS	\$ 1,100.00	\$ 1,100
New plumbing	1	LS	\$ 2,200.00	\$ 2,200
New electrical	1	LS	\$ 600.00	\$ 600
Structural				
Increase floor live load capacity	1600	SF	\$ 18.00	\$ 28,800
TOTAL BUILDING CODE COMPLIANCE				\$ 75,879

BUILDING IMPROVEMENTS

Exterior				
Replace roofing	1700	SF	\$ 1.85	\$ 3,145.00
Painting	1550	SF	\$ 1.25	\$ 1,937.50
Replace damaged wall framing	820	SF	\$ 8.00	\$ 6,560.00
Replace damaged wood siding	820	SF	\$ 7.00	\$ 5,740.00
New double-hung aluminum windows	22	EA	\$ 1,200.00	\$ 26,400.00
New exterior metal door/frame	2	EA	\$ 1,800.00	\$ 3,600.00
Wall cavity fiberglass insulation	1600	SF	\$ 5.33	\$ 8,528.00
Pest extermination	1	LS	\$ 3,000.00	\$ 3,000.00
Interior				
Plaster repairs	100	SF	\$ 11.20	\$ 1,120.00
Paint previously painted surfaces	1	LS	\$ 6,500.00	\$ 6,500.00
TOTAL BUILDING IMPROVEMENTS				\$ 66,531

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$ 21,361.39
Escalation	1	LS	2.50%	\$ 3,560.23
Contingency	1	LS	10%	\$ 14,240.93
Contract Administration	1	LS	8%	\$ 14,525.74
Planning/Design	1	LS	10%	\$ 18,157.18
TOTAL GENERAL CONDITIONS				\$ 71,845.47

TOTAL RENOVATION INTO OFFICES \$ 214,254.72**O&M Estimate for 50 years \$ 2,184,066.54**

BUILDING 1558

Total Gross Square Footage 1,410

	Total Units	Units	Cost Per Unit	Total
BUILDING CODE COMPLIANCE				
Entry Accessibility				
Remove existing steps/stoop	82	CF	\$ 44.00	\$ 3,608
Exterior entry accessibility ramp	5.9	CY	\$ 285.00	\$ 1,682
Exterior entry accessibility ramp railing	34	LF	\$ 22.00	\$ 748
Exterior egress door/frame/hardware	3	EA	\$ 2,200.00	\$ 6,600
Interior egress door/frame/hardware	1	EA	\$ 1,800.00	\$ 1,800
Raise porch & laundry floor	172	SF	\$ 55.00	\$ 9,460
Replace interior door hardware	10	EA	\$ 500.00	\$ 5,000
Restroom Accessibility				
Remove existing fixtures	1	LS	\$ 1,400.00	\$ 1,400
New fixtures	1	LS	\$ 3,400.00	\$ 3,400
New accessories	1	LS	\$ 1,100.00	\$ 1,100
New plumbing	1	LS	\$ 2,200.00	\$ 2,200
New electrical	1	LS	\$ 600.00	\$ 600
Structural				
Increase floor live load capacity	2500	SF	\$ 18.00	\$ 45,000
TOTAL BUILDING CODE COMPLIANCE				\$ 82,598

BUILDING IMPROVEMENTS

Exterior				
Replace roofing	1700	SF	\$ 1.85	\$ 3,145.00
Painting	2000	SF	\$ 1.25	\$ 2,500.00
Replace damaged wall framing	1000	SF	\$ 8.00	\$ 8,000.00
Replace damaged wood siding	1000	SF	\$ 7.00	\$ 7,000.00
New double-hung aluminum windows	24	EA	\$ 1,200.00	\$ 28,800.00
Wall cavity fiberglass insulation	2000	SF	\$ 5.33	\$ 10,660.00
Pest extermination	1	LS	\$ 3,000.00	\$ 3,000.00
Interior				
Plaster repairs	110	SF	\$ 11.20	\$ 1,232.00
Paint all previously painted surfaces	1	LS	\$ 5,400.00	\$ 5,400.00
TOTAL BUILDING IMPROVEMENTS				\$ 69,737.00

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$ 22,850.18
Escalation	1	LS	2.50%	\$ 3,808.36
Contingency	1	LS	10%	\$ 15,233.45
Contract Administration	1	LS	8%	\$ 15,538.12
Planning/Design	1	LS	10%	\$ 19,422.65
TOTAL GENERAL CONDITIONS				\$ 76,852.76
TOTAL RENOVATION INTO OFFICES				\$ 229,187.26
O&M Estimate for 50 years				\$ 2,007,142.58

BUILDING 1559

Total Gross Square Footage 3,041

	Total Units	Units	Cost Per Unit	Total
BUILDING CODE COMPLIANCE				
Entry Accessibility				
Remove existing steps/stoop	60	CF	\$ 44.00	\$ 2,640
Exterior entry accessibility ramp	5.9	CY	\$ 285.00	\$ 1,682
Exterior entry accessibility ramp railing	34	LF	\$ 22.00	\$ 748
Exterior egress door/frame/hardware	5	EA	\$ 2,200.00	\$ 11,000
Raise porch & laundry floor	172	SF	\$ 55.00	\$ 9,460
Replace interior door hardware	14	EA	\$ 500.00	\$ 7,000
Expand hallway width to 44"	65	SF	\$ 23.50	\$ 1,528
Restroom Accessibility				
Remove existing fixtures	1	LS	\$ 1,400.00	\$ 1,400
New fixtures	1	LS	\$ 3,400.00	\$ 3,400
New accessories	1	LS	\$ 1,100.00	\$ 1,100
New floor and wall finishes	550	SF	\$ 4.75	\$ 2,613
New plumbing	1	LS	\$ 2,200.00	\$ 2,200
New electrical	1	LS	\$ 600.00	\$ 600
Structural				
Increase floor live load capacity	2700	SF	\$ 18.00	\$ 48,600
Fire-Resistance Rated Construction				
Mechanical room walls & ceiling	335	SF	\$ 5.50	\$ 1,843
TOTAL BUILDING CODE COMPLIANCE				\$ 95,812

BUILDING IMPROVEMENTS

Exterior				
Replace roofing, cornice, guttering	3200	SF	\$ 3.75	\$ 12,000.00
Attic insulation	3100	SF	\$ 0.89	\$ 2,759.00
Painting	2000	SF	\$ 1.25	\$ 2,500.00
Replace damaged wall framing	1600	SF	\$ 8.00	\$ 12,800.00
Replace damaged wood siding	1600	SF	\$ 7.00	\$ 11,200.00
New double-hung aluminum windows	24	EA	\$ 1,200.00	\$ 28,800.00
Wall cavity fiberglass insulation	2000	SF	\$ 5.33	\$ 10,660.00
Pest extermination	1	LS	\$ 3,000.00	\$ 3,000.00
Interior				
Plaster repairs	125	SF	\$ 11.20	\$ 1,400.00
Paint all previously painted surfaces	1	LS	\$ 38,000.00	\$ 38,000.00
TOTAL BUILDING IMPROVEMENTS				\$ 123,119.00

BUILDING 1559 - continued

Total Gross Square Footage 3,041

	Total Units	Units	Cost Per Unit	Total
GENERAL CONDITIONS				
General Conditions	1	LS	15%	\$ 32,839.65
Escalation	1	LS	2.50%	\$ 5,473.28
Contingency	1	LS	10%	\$ 21,893.10
Contract Administration	1	LS	8%	\$ 22,330.96
Planning/Design	1	LS	10%	\$ 27,913.70
TOTAL GENERAL CONDITIONS				\$ 110,450.69
TOTAL RENOVATION INTO OFFICES				\$ 329,381.69
O&M Estimate for 50 years				\$ 4,144,646.17

BUILDING 1564

Total Gross Square Footage 720

	Total Units	Units	Cost Per Unit	Total
BUILDING CODE COMPLIANCE				
Entry Accessibility				
Remove existing steps/stoop	80	CF	\$ 44.00	\$ 3,520
Exterior entry accessibility ramp	5	CY	\$ 285.00	\$ 1,425
Exterior entry accessibility ramp railing	24	LF	\$ 22.00	\$ 528
Exterior egress door/frame/hardware	2	EA	\$ 2,200.00	\$ 4,400
Restroom Accessibility				
Remove existing fixtures	1	LS	\$ 1,400.00	\$ 1,400
New fixtures	1	LS	\$ 3,400.00	\$ 3,400
New accessories	1	LS	\$ 1,100.00	\$ 1,100
New plumbing	1	LS	\$ 2,200.00	\$ 2,200
New electrical	1	LS	\$ 600.00	\$ 600
Structural				
Increase floor live load capacity	1225	SF	\$ 18.00	\$ 22,050
TOTAL BUILDING CODE COMPLIANCE				\$ 40,623

BUILDING IMPROVEMENTS

Exterior				
Replace roofing	1350	SF	\$ 1.85	\$ 2,497.50
Painting	950	SF	\$ 1.25	\$ 1,187.50
Replace damaged wall framing	450	SF	\$ 8.00	\$ 3,600.00
Replace damaged wood siding	450	SF	\$ 7.00	\$ 3,150.00
New double-hung aluminum windows	12	EA	\$ 1,200.00	\$ 14,400.00
Wall cavity fiberglass insulation	700	SF	\$ 5.33	\$ 3,731.00
Pest extermination	1	LS	\$ 3,000.00	\$ 3,000.00
Interior				
Plaster repairs	200	SF	\$ 11.20	\$ 2,240.00
Paint previously painted surfaces	1	LS	\$ 7,400.00	\$ 7,400.00
TOTAL BUILDING IMPROVEMENTS				\$ 41,206.00

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$ 12,274.35
Escalation	1	LS	2.50%	\$ 2,045.73
Contingency	1	LS	10%	\$ 8,182.90
Contract Administration	1	LS	8%	\$ 8,346.56
Planning/Design	1	LS	10%	\$ 10,433.20
TOTAL GENERAL CONDITIONS				\$ 41,282.73

TOTAL RENOVATION INTO OFFICES \$ 123,111.73**O&M Estimate for 50 years \$ 1,049,774.52**

BUILDING 1565

Total Gross Square Footage 317

	Total Units	Units	Cost Per Unit		Total
Demolition					
Building Demolition	600	CF	\$	0.37	\$ 222.00
Utilities Demolition	1	LS	\$	950.00	\$ 950.00
Earthwork	125	CF	\$	52.56	\$ 6,570.00

TOTAL DEMOLITION	\$ 7,742.00
-------------------------	--------------------

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$	1,161.30
Escalation	1	LS	2.50%	\$	193.55
Contingency	1	LS	10%	\$	774.20
Contract Administration	1	LS	8%	\$	619.36
Planning/Design	1	LS	10%	\$	774.20

TOTAL GENERAL CONDITIONS	\$ 3,522.61
---------------------------------	--------------------

DEMOLITION TOTAL	\$ 11,264.61
-------------------------	---------------------

O&M Estimate for 50 years	DEMOLISHED
--------------------------------------	-------------------

SITE UTILITIES

	Total Units	Units	Cost Per Unit		Total
SITEWORK					
Trenching/Backfilling	120	LF	\$	250.00	\$ 30,000.00
Remove exist. overhead lines	120	LF	\$	89.00	\$ 10,680.00
Remove transformer	1	EA	\$	2,500.00	\$ 2,500.00
TOTAL SITEWORK					\$ 2,839.00
ELECTRICAL					
New on-grade transformer	1	EA	\$	14,000.00	\$ 14,000.00
New conductors	1	EA	\$	14,000.00	\$ 12,600.00
TOTAL ELECTRICAL					\$ 28,000.00
GENERAL CONDITIONS					
General Conditions	1	LS	15%	\$	4,625.85
Escalation	1	LS	2.50%	\$	770.98
Contingency	1	LS	10%	\$	3,083.90
Contract Administration	1	LS	8%	\$	2,467.12
Planning/Design	1	LS	10%	\$	3,083.90
TOTAL GENERAL CONDITIONS					\$ 14,031.75
TOTAL UTILITY SITEWORK FOR OFFICES					\$ 44,870.75

ARCHAEOLOGY

	Total Units	Units	Cost Per Unit		Total
Mitigation @ Utility Trenches	1	LS	\$ 375,000.00	\$	375,000.00
Mitigation @ Staging Area	1	LS	\$ 25,000.00	\$	25,000.00
Contingency	1	LS	10%	\$	40,000.00
Contract Administration	1	LS	8%	\$	32,000.00

TOTAL ARCHAEOLOGICAL MITIGATION \$ 472,000.00

HISTORIC AMERICAN BUILDING SURVEY

	Total Units	Units	Cost Per Unit		Total
Documentation	1	LS	\$ 77,118.96	\$	77,118.96

TOTAL HISTORIC AMERICAN BUILDING SURVEY \$ 77,118.96

SITE IMPROVEMENTS

	Total Units	Units	Cost Per Unit		Total
DEMOLITION/CONSTRUCTION					
Demolish tennis court	4000	CF	\$	3.87	\$ 15,480.00
Bituminous paved parking lot	20	CAR	\$	800.00	\$ 16,000.00

TOTAL DEMOLITION/CONSTRUCTION \$ 31,480.00

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$	4,722.00
Escalation	1	LS	2.50%	\$	787.00
Contingency	1	LS	10%	\$	3,148.00
Contract Administration	1	LS	8%	\$	3,210.96
Planning/Design	1	LS	10%	\$	4,013.70

TOTAL GENERAL CONDITIONS \$ 15,881.66

TOTAL SITE FOR INTERPRETIVE CENTER/CURATION \$ 47,361.66

Option 3 – Interpretive Center Partnership

INTERPRETIVE CENTER, CURATION FACILITY, AND OFFICES SUMMARY

Bldg 1551	\$	88,086.22
Bldg 1552		No Work
Bldg 1553		No Work
Bldg 1555	\$	203,478.79
Bldg 1556	\$	250,054.67
Bldg 1557	\$	214,254.72
Bldg 1558	\$	229,187.26
Bldg 1559	\$	461,511.39
Bldg 1561		No Work
Bldg 1562	\$	55,958.38
Bldg 1564	\$	123,111.73
Bldg 1565	\$	11,264.61
Site Utilities	\$	81,727.15
Archaeology	\$	472,000.00
HABS Documentation	\$	77,118.96
Site Improvements	\$	47,361.66
TOTAL	\$	2,315,115.53
O&M ESTIMATE FOR 50 YEARS	\$	19,573,002.07

BUILDING 1551

Total Gross Square Footage 800

	Total Units	Units	Cost Per Unit		Total
BUILDING IMPROVEMENTS					
Exterior					
Replace roofing	1150	SF	\$	1.85	\$ 2,127.50
Painting	1150	SF	\$	1.25	\$ 1,437.50
Replace damaged wall framing	510	SF	\$	8.00	\$ 4,080.00
Replace damaged wood siding	510	SF	\$	7.00	\$ 3,570.00
Pest extermination	1	LS	\$	2,400.00	\$ 2,400.00
Insulate exterior envelope	1950	SF	\$	5.33	\$ 10,393.50
New insulated glazed windows	2	EA	\$	920.00	\$ 1,840.00
Storefront entrance system	4	EA	\$	5,100.00	\$ 20,400.00
Interior					
HVAC climate control system	1	LS	\$	6,000.00	\$ 6,000.00
Indirect ceiling lighting	1	LS	\$	2,800.00	\$ 2,800.00
Building security system	1	LS	\$	3,500.00	\$ 3,500.00
TOTAL BUILDING IMPROVEMENTS					\$ 58,548.50
GENERAL CONDITIONS					
General Conditions	1	LS	15%	\$	8,782.28
Escalation	1	LS	2.50%	\$	1,463.71
Contingency	1	LS	10%	\$	5,854.85
Contract Administration	1	LS	8%	\$	5,971.95
Planning/Design	1	LS	10%	\$	7,464.93
TOTAL GENERAL CONDITIONS					\$ 29,537.72
TOTAL RENOVATION INTO CURATION FACILITY					\$ 88,086.22
O&M Estimate for 50 years					\$ 1,048,438.30

BUILDING 1555

Total Gross Square Footage 960

	Total Units	Units	Cost Per Unit	Total
BUILDING CODE COMPLIANCE				
Entry Accessibility				
Remove existing steps/stoop	8	CF	\$ 44.00	\$ 352
Exterior entry accessibility ramp	3	CY	\$ 285.00	\$ 855
Exterior entry accessibility ramp railing	16	LF	\$ 22.00	\$ 352
Exterior egress door/frame/hardware	3	EA	\$ 2,200.00	\$ 6,600
Interior egress door/frame/hardware	3	EA	\$ 1,800.00	\$ 5,400
Restroom Accessibility				
Remove existing fixtures	1	LS	\$ 1,400.00	\$ 1,400
New fixtures	1	LS	\$ 3,400.00	\$ 3,400
New accessories	1	LS	\$ 1,100.00	\$ 1,100
New plumbing	1	LS	\$ 2,200.00	\$ 2,200
New electrical	1	LS	\$ 600.00	\$ 600
Structural				
Increase 2nd floor live load capacity	734	SF	\$ 35.00	\$ 25,690
Reconstruct exterior wood stairs	17	Riser	\$ 300.00	\$ 5,100
Remove & replace loft door w/ Exterior passage door/frame	1	LS	\$ 5,150.00	\$ 5,150
TOTAL BUILDING CODE COMPLIANCE				\$ 58,199

BUILDING IMPROVEMENTS

Exterior				
Replace roofing	800	SF	\$ 1.85	\$ 1,480.00
Painting	2150	SF	\$ 1.25	\$ 2,687.50
Replace damaged wall framing	1200	SF	\$ 8.00	\$ 9,600.00
Replace damaged wood siding	1200	SF	\$ 7.00	\$ 8,400.00
Pest extermination	1	LS	\$ 3,000.00	\$ 3,000.00
Insulate exterior envelope	2400	SF	\$ 5.33	\$ 12,792.00
New insulated glazed windows	10	EA	\$ 1,200.00	\$ 12,000.00
Pedestrian door entrance	2	EA	\$ 2,200.00	\$ 4,400.00
Interior				
Plaster repairs	420	SF	\$ 11.20	\$ 4,704.00
Paint previously painted surfaces	1	LS	\$ 9,200.00	\$ 9,200.00
HVAC climate control system	1	LS	\$ 22,000.00	\$ 22,000.00
Indirect ceiling lighting	1	LS	\$ 2,800.00	\$ 2,800.00
Building security system	1	LS	\$ 3,500.00	\$ 3,500.00
TOTAL BUILDING IMPROVEMENTS				\$ 96,563.50

BUILDING 1555 - Continued

Total Gross Square Footage 960

	Total Units	Units	Cost Per Unit	Total
GENERAL CONDITIONS				
General Conditions	1	LS	15%	\$ 14,484.53
Escalation	1	LS	2.50%	\$ 2,414.09
Contingency	1	LS	10%	\$ 9,656.35
Contract Administration	1	LS	8%	\$ 9,849.48
Planning/Design	1	LS	10%	\$ 12,311.85
TOTAL GENERAL CONDITIONS				\$ 48,716.29
TOTAL RENOVATION INTO CURATION FACILITY				\$ 203,478.79
O&M Estimate for 50 years				\$ 1,254,742.40

BUILDING 1556

Total Gross Square Footage 2,483

	Total Units	Units	Cost Per Unit	Total
BUILDING CODE COMPLIANCE				
Entry Accessibility				
Remove existing steps/stoop	90	CF	\$ 44.00	\$ 3,960.00
Exterior entry accessibility ramp	6	CY	\$ 285.00	\$ 1,710.00
Exterior entry accessibility ramp railing	30	LF	\$ 22.00	\$ 660.00
Exterior egress door/frame/hardware	3	EA	\$ 2,200.00	\$ 6,600.00
Interior egress door/frame/hardware	1	EA	\$ 1,800.00	\$ 1,800.00
Restroom Accessibility				
Remove existing fixtures	1	LS	\$ 1,400.00	\$ 1,400.00
New fixtures	1	LS	\$ 3,400.00	\$ 3,400.00
New accessories	1	LS	\$ 1,100.00	\$ 1,100.00
New plumbing	1	LS	\$ 2,200.00	\$ 2,200.00
New electrical	1	LS	\$ 600.00	\$ 600.00
Structural				
Increase floor live load capacity	2406	SF	\$ 18.00	\$ 43,308.00
TOTAL BUILDING CODE COMPLIANCE				\$ 66,738.00

BUILDING IMPROVEMENTS

Exterior				
Replace roofing	2500	SF	\$ 1.85	\$ 4,625.00
Painting	2550	SF	\$ 1.25	\$ 3,187.50
Replace damaged wall framing	1075	SF	\$ 8.00	\$ 8,600.00
Replace damaged wood siding	1075	SF	\$ 7.00	\$ 7,525.00
New double-hung aluminum windows	30	EA	\$ 1,200.00	\$ 36,000.00
New exterior metal door/frame	5	EA	\$ 1,800.00	\$ 9,000.00
Wall cavity fiberglass insulation	2100	SF	\$ 5.33	\$ 11,193.00
Repair brick masonry chimney	260	SF	\$ 6.10	\$ 1,586.00
Pest extermination	1	LS	\$ 3,000.00	\$ 3,000.00
Interior				
Plaster repairs	200	SF	\$ 11.20	\$ 2,240.00
Paint previously painted surfaces	1	LS	\$ 7,400.00	\$ 7,400.00
Replace kitchen casework	14	LF	\$ 365.00	\$ 5,110.00
TOTAL BUILDING IMPROVEMENTS				\$ 99,466.50

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$ 24,930.68
Escalation	1	LS	2.50%	\$ 4,155.11
Contingency	1	LS	10%	\$ 16,620.45
Contract Administration	1	LS	8%	\$ 16,952.86
Planning/Design	1	LS	10%	\$ 21,191.07
TOTAL GENERAL CONDITIONS				\$ 83,850.17

TOTAL RENOVATION INTO OFFICES \$ 250,054.67**O&M Estimate for 50 years \$ 3,400,792.42**

BUILDING 1557

Total Gross Square Footage 1,545

	Total Units	Units	Cost Per Unit	Total
BUILDING CODE COMPLIANCE				
Entry Accessibility				
Remove existing steps/stoop	90	CF	\$ 44.00	\$ 3,960.00
Exterior entry accessibility ramp	6.75	CY	\$ 285.00	\$ 1,923.75
Exterior entry accessibility ramp railing	35	LF	\$ 22.00	\$ 770.00
Exterior egress door/frame/hardware	3	EA	\$ 2,200.00	\$ 6,600.00
Interior egress door/frame/hardware	1	EA	\$ 1,800.00	\$ 1,800.00
Raise porch & laundry floor	315	SF	\$ 55.00	\$ 17,325.00
Replace interior door hardware	12	EA	\$ 500.00	\$ 6,000.00
Restroom Accessibility				
Remove existing fixtures	1	LS	\$ 1,400.00	\$ 1,400.00
New fixtures	1	LS	\$ 3,400.00	\$ 3,400.00
New accessories	1	LS	\$ 1,100.00	\$ 1,100.00
New plumbing	1	LS	\$ 2,200.00	\$ 2,200.00
New electrical	1	LS	\$ 600.00	\$ 600.00
Structural				
Increase floor live load capacity	1600	SF	\$ 18.00	\$ 28,800.00
TOTAL BUILDING CODE COMPLIANCE				\$ 75,878.75

BUILDING IMPROVEMENTS

Exterior				
Replace roofing	1700	SF	\$ 1.85	\$ 3,145.00
Painting	1550	SF	\$ 1.25	\$ 1,937.50
Replace damaged wall framing	820	SF	\$ 8.00	\$ 6,560.00
Replace damaged wood siding	820	SF	\$ 7.00	\$ 5,740.00
New double-hung aluminum windows	22	EA	\$ 1,200.00	\$ 26,400.00
New exterior metal door/frame	2	EA	\$ 1,800.00	\$ 3,600.00
Wall cavity fiberglass insulation	1600	SF	\$ 5.33	\$ 8,528.00
Pest extermination	1	LS	\$ 3,000.00	\$ 3,000.00
Interior				
Plaster repairs	100	SF	\$ 11.20	\$ 1,120.00
Paint previously painted surfaces	1	LS	\$ 6,500.00	\$ 6,500.00
TOTAL BUILDING IMPROVEMENTS				\$ 66,530.50

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$ 21,361.39
Escalation	1	LS	2.50%	\$ 3,560.23
Contingency	1	LS	10%	\$ 14,240.93
Contract Administration	1	LS	8%	\$ 14,525.74
Planning/Design	1	LS	10%	\$ 18,157.18
TOTAL GENERAL CONDITIONS				\$ 71,845.47

TOTAL RENOVATION INTO OFFICES \$ 214,254.72**O&M Estimate for 50 years \$ 2,184,066.54**

BUILDING 1558

Total Gross Square Footage 1,410

	Total Units	Units	Cost Per Unit	Total
BUILDING CODE COMPLIANCE				
Entry Accessibility				
Remove existing steps/stoop	82	CF	\$ 44.00	\$ 3,608.00
Exterior entry accessibility ramp	5.9	CY	\$ 285.00	\$ 1,681.50
Exterior entry accessibility ramp railing	34	LF	\$ 22.00	\$ 748.00
Exterior egress door/frame/hardware	3	EA	\$ 2,200.00	\$ 6,600.00
Interior egress door/frame/hardware	1	EA	\$ 1,800.00	\$ 1,800.00
Raise porch & laundry floor	172	SF	\$ 55.00	\$ 9,460.00
Replace interior door hardware	10	EA	\$ 500.00	\$ 5,000.00
Restroom Accessibility				
Remove existing fixtures	1	LS	\$ 1,400.00	\$ 1,400.00
New fixtures	1	LS	\$ 3,400.00	\$ 3,400.00
New accessories	1	LS	\$ 1,100.00	\$ 1,100.00
New plumbing	1	LS	\$ 2,200.00	\$ 2,200.00
New electrical	1	LS	\$ 600.00	\$ 600.00
Structural				
Increase floor live load capacity	2500	SF	\$ 18.00	\$ 45,000.00
TOTAL BUILDING CODE COMPLIANCE				\$ 82,597.50

BUILDING IMPROVEMENTS

Exterior				
Replace roofing	1700	SF	\$ 1.85	\$ 3,145.00
Painting	2000	SF	\$ 1.25	\$ 2,500.00
Replace wall framing	1000	SF	\$ 8.00	\$ 8,000.00
Replace wood siding	1000	SF	\$ 7.00	\$ 7,000.00
New double-hung aluminum windows	24	EA	\$ 1,200.00	\$ 28,800.00
Wall cavity fiberglass insulation	2000	SF	\$ 5.33	\$ 10,660.00
Pest extermination	1	LS	\$ 3,000.00	\$ 3,000.00
Interior				
Plaster repairs	110	SF	\$ 11.20	\$ 1,232.00
Paint all previously painted surfaces	1	LS	\$ 5,400.00	\$ 5,400.00
TOTAL BUILDING IMPROVEMENTS				\$ 69,737.00

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$ 22,850.18
Escalation	1	LS	2.50%	\$ 3,808.36
Contingency	1	LS	10%	\$ 15,233.45
Contract Administration	1	LS	8%	\$ 15,538.12
Planning/Design	1	LS	10%	\$ 19,422.65
TOTAL GENERAL CONDITIONS				\$ 76,852.76
TOTAL RENOVATION INTO OFFICES				\$ 229,187.26
O&M Estimate for 50 years				\$ 2,007,142.58

BUILDING 1559

Total Gross Square Footage 3,041

	Total Units	Units	Cost Per Unit		Total
BUILDING CODE COMPLIANCE					
Entry Accessibility					
Remove existing steps/stoop	60	CF	\$	44.00	\$ 2,640.00
Exterior entry accessibility ramp	5.9	CY	\$	285.00	\$ 1,681.50
Exterior entry accessibility ramp railing	34	LF	\$	22.00	\$ 748.00
Exterior egress door/frame/hardware	5	EA	\$	2,200.00	\$ 11,000.00
Raise porch & laundry floor	172	SF	\$	55.00	\$ 9,460.00
Replace interior door hardware	14	EA	\$	500.00	\$ 7,000.00
Expand hallway width to 44"	65	SF	\$	23.50	\$ 1,527.50
Restroom Accessibility					
Remove existing fixtures	1	LS	\$	1,400.00	\$ 1,400.00
New fixtures	1	LS	\$	3,400.00	\$ 3,400.00
New accessories	1	LS	\$	1,100.00	\$ 1,100.00
New floor and wall finishes	550	SF	\$	4.75	\$ 2,612.50
New plumbing	1	LS	\$	2,200.00	\$ 2,200.00
New electrical	1	LS	\$	600.00	\$ 600.00
Structural					
Increase floor live load capacity	2700	SF	\$	18.00	\$ 48,600.00
Fire-Resistance Rated Construction					
Mechanical room walls & ceiling	335	SF	\$	5.50	\$ 1,842.50
TOTAL BUILDING CODE COMPLIANCE					\$ 95,812.00

BUILDING IMPROVEMENTS

Exterior					
Replace roofing, cornice, guttering	3200	SF	\$	3.75	\$ 12,000.00
Attic insulation	3100	SF	\$	0.89	\$ 2,759.00
Painting	2000	SF	\$	1.25	\$ 2,500.00
Replace damaged wall framing	1600	SF	\$	8.00	\$ 12,800.00
Replace damaged wood siding	1600	SF	\$	7.00	\$ 11,200.00
New double-hung aluminum windows	24	EA	\$	1,200.00	\$ 28,800.00
Wall cavity fiberglass insulation	2000	SF	\$	5.33	\$ 10,660.00
Pest extermination	1	LS	\$	3,000.00	\$ 3,000.00
Insulate exterior envelope	3100	SF	\$	5.33	\$ 16,523.00
New insulated glazed windows	30	EA	\$	1,200.00	\$ 36,000.00
Interior					
Plaster repairs	125	SF	\$	11.20	\$ 1,400.00
Paint all previously painted surfaces	1	LS	\$	38,000.00	\$ 38,000.00
HVAC climate control system	1	LS	\$	22,000.00	\$ 22,000.00
Indirect ceiling lighting	1	LS	\$	3,800.00	\$ 3,800.00
Building security system	1	LS	\$	3,500.00	\$ 3,500.00
New 300 amp electrical service	1	EA	\$	2,500.00	\$ 2,500.00
New electrical power distribution	1	LS	\$	3,500.00	\$ 3,500.00
TOTAL BUILDING IMPROVEMENTS					\$ 210,942.00

BUILDING 1559 - continued

Total Gross Square Footage 3,041

	Total Units	Units	Cost Per Unit	Total
GENERAL CONDITIONS				
General Conditions	1	LS	15%	\$ 46,013.10
Escalation	1	LS	2.50%	\$ 7,668.85
Contingency	1	LS	10%	\$ 30,675.40
Contract Administration	1	LS	8%	\$ 31,288.91
Planning/Design	1	LS	10%	\$ 39,111.14
TOTAL GENERAL CONDITIONS				\$ 154,757.39
TOTAL RENOVATION INTO INTERPRETIVE CENTER				\$ 461,511.39
O&M Estimate for 50 years				\$ 4,144,646.17

BUILDING 1562

Total Gross Square Footage 432

	Total Units	Units	Cost Per Unit	Total
BUILDING IMPROVEMENTS				
Exterior				
Replace roofing	800	SF	\$ 1.85	\$ 1,480.00
Painting	2150	SF	\$ 1.25	\$ 2,687.50
Replace damaged wall framing	310	SF	\$ 8.00	\$ 2,480.00
Replace damaged wood siding	310	SF	\$ 7.00	\$ 2,170.00
Pest extermination	1	LS	\$ 2,400.00	\$ 2,400.00
Insulate exterior envelope	1250	SF	\$ 5.33	\$ 6,662.50
New insulated glazed windows	4	EA	\$ 920.00	\$ 3,680.00
Storefront entrance system	1	EA	\$ 5,100.00	\$ 5,100.00
New Building Requiriements				
HVAC climate control system	1	LS	\$ 3,000.00	\$ 3,000.00
Indirect ceiling lighting	1	LS	\$ 2,800.00	\$ 2,800.00
Building security system	1	LS	\$ 3,500.00	\$ 3,500.00
TOTAL BUILDING IMPROVEMENTS				\$ 35,960.00
GENERAL CONDITIONS				
General Conditions	1	LS	15%	\$ 5,946.00
Escalation	1	LS	2.50%	\$ 991.00
Contingency	1	LS	10%	\$ 3,964.00
Contract Administration	1	LS	8%	\$ 4,043.28
Planning/Design	1	LS	10%	\$ 5,054.10
TOTAL GENERAL CONDITIONS				\$ 19,998.38
TOTAL RENOVATION INTO CURATION FACILITY				\$ 55,958.38
O&M Estimate for 50 years				\$ 566,156.68

BUILDING 1564

Total Gross Square Footage 720

	Total Units	Units	Cost Per Unit	Total
BUILDING CODE COMPLIANCE				
Entry Accessibility				
Remove existing steps/stoop	80	CF	\$ 44.00	\$ 3,520.00
Exterior entry accessibility ramp	5	CY	\$ 285.00	\$ 1,425.00
Exterior entry accessibility ramp railing	24	LF	\$ 22.00	\$ 528.00
Exterior egress door/frame/hardware	2	EA	\$ 2,200.00	\$ 4,400.00
Restroom Accessibility				
Remove existing fixtures	1	LS	\$ 1,400.00	\$ 1,400.00
New fixtures	1	LS	\$ 3,400.00	\$ 3,400.00
New accessories	1	LS	\$ 1,100.00	\$ 1,100.00
New plumbing	1	LS	\$ 2,200.00	\$ 2,200.00
New electrical	1	LS	\$ 600.00	\$ 600.00
Structural				
Increase floor live load capacity	1225	SF	\$ 18.00	\$ 22,050.00
TOTAL BUILDING CODE COMPLIANCE				\$ 40,623.00

BUILDING IMPROVEMENTS

Exterior				
Replace roofing	1350	SF	\$ 1.85	\$ 2,497.50
Painting	950	SF	\$ 1.25	\$ 1,187.50
Replace damaged wall framing	450	SF	\$ 8.00	\$ 3,600.00
Replace damaged wood siding	450	SF	\$ 7.00	\$ 3,150.00
New double-hung aluminum windows	12	EA	\$ 1,200.00	\$ 14,400.00
Wall cavity fiberglass insulation	700	SF	\$ 5.33	\$ 3,731.00
Pest extermination	1	LS	\$ 3,000.00	\$ 3,000.00
Interior				
Plaster repairs	200	SF	\$ 11.20	\$ 2,240.00
Paint previously painted surfaces	1	LS	\$ 7,400.00	\$ 7,400.00
TOTAL BUILDING IMPROVEMENTS				\$ 41,206.00

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$ 12,274.35
Escalation	1	LS	2.50%	\$ 2,045.73
Contingency	1	LS	10%	\$ 8,182.90
Contract Administration	1	LS	8%	\$ 8,346.56
Planning/Design	1	LS	10%	\$ 10,433.20
TOTAL GENERAL CONDITIONS				\$ 41,282.73

TOTAL RENOVATION INTO OFFICES \$ 123,111.73**O&M Estimate for 50 years \$ 1,049,774.52**

BUILDING 1565

Total Gross Square Footage 317

	Total Units	Units	Cost Per Unit		Total
Demolition					
Building Demolition	600	CF	\$	0.37	\$ 222.00
Utilities demolition	1	LS	\$	950.00	\$ 950.00
Earthwork	125	CF	\$	52.56	\$ 6,570.00

TOTAL DEMOLITION	\$ 7,742.00
-------------------------	--------------------

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$	1,161.30
Escalation	1	LS	2.50%	\$	193.55
Contingency	1	LS	10%	\$	774.20
Contract Administration	1	LS	8%	\$	619.36
Planning/Design	1	LS	10%	\$	774.20

TOTAL GENERAL CONDITIONS	\$ 3,522.61
---------------------------------	--------------------

DEMOLITION TOTAL	\$ 11,264.61
-------------------------	---------------------

O&M Estimate for 50 years	DEMOLISHED
--------------------------------------	-------------------

SITE UTILITIES

	Total Units	Units	Cost Per Unit	Total
SITEWORK				
Trenching/Backfilling	1710	CY	\$ 24.00	\$ 41,040.00
Remove exist overhead	120	LF	\$ 89.00	\$ 10,680.00
Remove transformer	1	EA	\$ 2,500.00	\$ 2,500.00

DOMESTIC WATER SYSTEM

4" Domestic water piping	1880	LF	\$ 43.30	\$ 81,404.00
--------------------------	------	----	----------	--------------

SANITARY SEWER

10" Sanitary sewer piping	1880	LF	\$ 15.50	\$ 29,140.00
New manhole	1	EA	\$ 3,850.00	\$ 3,850.00

ELECTRICAL

New on-grade transformer	1	EA	\$ 25,000.00	\$ 25,000.00
New conductors	1	EA	\$ 22,800.00	\$ 22,800.00

TOTAL UTILITY WORK \$ 54,321.80

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$ 8,148.27
Escalation	1	LS	2.50%	\$ 1,358.05
Contingency	1	LS	10%	\$ 5,432.18
Contract Administration	1	LS	8%	\$ 5,540.82
Planning/Design	1	LS	10%	\$ 6,926.03

TOTAL GENERAL CONDITIONS \$ 27,405.35

TOTAL UTILITIES FOR INTERPRETIVE CENTER/CURATION \$ 81,727.15

ARCHAEOLOGY

	Total Units	Units	Cost Per Unit		Total
Mitigation @ Utility Trenches	1	LS	\$ 375,000.00	\$	375,000.00
Mitigation @ Staging Area	1	LS	\$ 25,000.00	\$	25,000.00
Contingency	1	LS	10%	\$	40,000.00
Contract Administration	1	LS	8%	\$	32,000.00
TOTAL ARCHAEOLOGICAL MITIGATION					\$ 472,000.00

HISTORIC AMERICAN BUILDING SURVEY

	Total Units	Units	Cost Per Unit		Total
Documentation	1	LS	\$ 77,118.96	\$	77,118.96
TOTAL HISTORIC AMERICAN BUILDING SURVEY					\$ 77,118.96

SITE IMPROVEMENTS

	Total Units	Units	Cost Per Unit		Total
DEMOLITION/CONSTRUCTION					
Demolish tennis court	4000	CF	\$	3.87	\$ 15,480.00
Bituminous paved parking lot	20	CAR	\$	800.00	\$ 16,000.00
TOTAL DEMOLITION/CONSTRUCTION					\$ 31,480.00

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$	4,722.00
Escalation	1	LS	2.50%	\$	787.00
Contingency	1	LS	10%	\$	3,148.00
Contract Administration	1	LS	8%	\$	3,210.96
Planning/Design	1	LS	10%	\$	4,013.70
TOTAL GENERAL CONDITIONS					\$ 15,881.66

TOTAL SITE FOR INTERPRETIVE CENTER/CURATION \$ 47,361.66

Option 4 – Renovation into GOQs, SOQs, and JNCOQs

RENOVATION INTO GOQs, SOQs, and JNCOQs SUMMARY

Bldg 1551	No Work
Bldg 1552	No Work
Bldg 1553	No Work
Bldg 1555	No Work
Bldg 1556	\$ 233,748.90
Bldg 1557	\$ 219,063.47
Bldg 1558	\$ 159,881.05
Bldg 1559	\$ 307,557.41
Bldg 1561	No Work
Bldg 1562	No Work
Bldg 1564	No Work
Bldg 1565	\$ 11,264.61
Utilities	\$ 325,594.86
Archaeology	\$ 590,000.00
HABS Documentation	\$ 77,118.96
Site Improvements	No Work
TOTAL	\$ 1,924,229.27
O&M ESTIMATE FOR 50 YEARS	\$ 19,425,110.36

BUILDING 1556

Total Gross Square Footage 2,483

	Total Units	Units	Cost Per Unit	Total
BUILDING RENOVATIONS AND ADDITIONS				
Bedroom 3 Addition	140	SF	\$ 110.00	\$ 15,400.00
Bedroom 4 Addition	130	SF	\$ 110.00	\$ 14,300.00
Entry/Foyer & Closet	30	SF	\$ 55.00	\$ 1,650.00
Bedroom Closet	30	SF	\$ 55.00	\$ 1,650.00
Exterior Storage Addition	60	SF	\$ 85.00	\$ 5,100.00
Interior Storage Addition	40	SF	\$ 110.00	\$ 4,400.00
Fiberoptic Communication Line	1	Allow	\$ 1,500.00	\$ 1,500.00
TOTAL BUILDING RENOVATIONS AND ADDITIONS				\$ 44,000.00

BUILDING IMPROVEMENTS**Exterior**

Replace roofing	2500	SF	\$ 1.85	\$ 4,625.00
Painting	2550	SF	\$ 1.25	\$ 3,187.50
Replace damaged wall framing	1075	SF	\$ 8.00	\$ 8,600.00
Replace damaged wood siding	1075	SF	\$ 7.00	\$ 7,525.00
New double-hung aluminum windows	30	EA	\$ 1,200.00	\$ 36,000.00
New exterior metal door/frame	5	EA	\$ 1,800.00	\$ 9,000.00
Wall cavity fiberglass insulation	2100	SF	\$ 5.33	\$ 11,193.00
Repair brick masonry chimney	260	SF	\$ 6.10	\$ 1,586.00
Pest extermination	1	LS	\$ 3,000.00	\$ 3,000.00

Interior

Repair dining room deflected floor	240	SF	\$ 10.00	\$ 2,400.00
Plaster repairs	200	SF	\$ 11.20	\$ 2,240.00
Paint previously painted surfaces	1	LS	\$ 7,400.00	\$ 7,400.00
Replace kitchen casework	14	LF	\$ 365.00	\$ 5,110.00
Replace bathroom fixtures	1	Room	\$ 8,500.00	\$ 8,500.00
Replace bathroom accessories	2	Room	\$ 500.00	\$ 1,000.00

TOTAL BUILDING IMPROVEMENTS \$ 111,366.50**GENERAL CONDITIONS**

General Conditions	1	LS	15%	\$ 23,304.98
Escalation	1	LS	2.50%	\$ 3,884.16
Contingency	1	LS	10%	\$ 15,536.65
Contract Administration	1	LS	8%	\$ 15,847.38
Planning/Design	1	LS	10%	\$ 19,809.23

TOTAL GENERAL CONDITIONS \$ 78,382.40**TOTAL RENOVATION INTO SOQ \$ 233,748.90****O&M Estimate for 50 years \$ 3,433,189.08**

BUILDING 1557

Total Gross Square Footage 1,545

	Total Units	Units	Cost Per Units	Total
BUILDING RENOVATIONS AND ADDITIONS				
Bedroom 4 Addition	160	SF	\$ 110.00	\$ 17,600.00
Master Bedroom Addition	53	SF	\$ 110.00	\$ 5,830.00
Kitchen Addition	80	SF	\$ 135.00	\$ 10,800.00
Dining Room Addition	80	SF	\$ 110.00	\$ 8,800.00
Secondary Dining Room Addition	102	SF	\$ 110.00	\$ 11,220.00
Bath 2 Addition	65	SF	\$ 145.00	\$ 9,425.00
Bedroom Closet	30	SF	\$ 55.00	\$ 1,650.00
Exterior Storage Addition	60	SF	\$ 110.00	\$ 6,600.00
Interior Storage	80	SF	\$ 55.00	\$ 4,400.00
TOTAL BUILDING RENOVATIONS AND ADDITIONS				\$ 76,325.00

BUILDING IMPROVEMENTS**Exterior**

Replace roofing	1700	SF	\$ 1.85	\$ 3,145.00
Painting	1550	SF	\$ 1.25	\$ 1,937.50
Replace damaged wall framing	820	SF	\$ 8.00	\$ 6,560.00
Replace damaged wood siding	820	SF	\$ 7.00	\$ 5,740.00
New double-hung aluminum windows	22	EA	\$ 1,200.00	\$ 26,400.00
New exterior metal door/frame	3	EA	\$ 1,800.00	\$ 5,400.00
Wall cavity fiberglass insulation	1600	SF	\$ 5.33	\$ 8,528.00
Pest extermination	1	LS	\$ 3,000.00	\$ 3,000.00

Interior

Repair dining room deflected floor	95	SF	\$ 10.00	\$ 950.00
Plaster repairs	100	SF	\$ 11.20	\$ 1,120.00
Paint previously painted surfaces	1	LS	\$ 6,500.00	\$ 6,500.00

TOTAL BUILDING IMPROVEMENTS \$ 69,280.50**GENERAL CONDITIONS**

General Conditions	1	LS	15%	\$ 21,840.83
Escalation	1	LS	2.50%	\$ 3,640.14
Contingency	1	LS	10%	\$ 14,560.55
Contract Administration	1	LS	8%	\$ 14,851.76
Planning/Design	1	LS	10%	\$ 18,564.70

TOTAL GENERAL CONDITIONS \$ 73,457.97**TOTAL RENOVATION INTO SOQ \$ 219,063.47****O&M Estimate for 50 years \$ 2,173,398.14**

BUILDING 1558

Total Building Square Footage 1,410

	Total Units	Units	Cost Per Unit	Total
BUILDING RENOVATIONS AND ADDITIONS				
Kitchen Addition	80	SF	\$ 135.00	\$ 10,800.00
Secondary Dining Room	45	SF	\$ 55.00	\$ 2,475.00
Bath 2	65	SF	\$ 95.00	\$ 6,175.00
Bedroom Closet	34	SF	\$ 55.00	\$ 1,870.00
Exterior Storage	58	SF	\$ 55.00	\$ 3,190.00
Interior Storage	58	SF	\$ 55.00	\$ 3,190.00
Fiberoptic Communication Line	1	Allow	\$ 1,500.00	\$ 1,500.00
TOTAL BUILDING RENOVATIONS AND ADDITIONS				\$ 29,200.00

BUILDING IMPROVEMENTS**Exterior**

Replace roofing	1700	SF	\$ 1.85	\$ 3,145.00
Painting	2000	SF	\$ 1.25	\$ 2,500.00
Replace damaged wall framing	1000	SF	\$ 8.00	\$ 8,000.00
Replace damaged wood siding	1000	SF	\$ 7.00	\$ 7,000.00
New double-hung aluminum windows	24	EA	\$ 1,200.00	\$ 28,800.00
New exterior metal door/frame	3	EA	\$ 1,800.00	\$ 5,400.00
Wall cavity fiberglass insulation	2000	SF	\$ 5.33	\$ 10,660.00
Pest extermination	1	LS	\$ 3,000.00	\$ 3,000.00

Interior

Plaster repairs	110	SF	\$ 11.20	\$ 1,232.00
Paint all previously painted surfaces	1	LS	\$ 5,400.00	\$ 5,400.00
Replace porch deflected floor	172	SF	\$ 11.23	\$ 1,931.56

TOTAL BUILDING IMPROVEMENTS \$ 77,068.56**GENERAL CONDITIONS**

General Conditions	1	LS	15%	\$ 15,940.28
Escalation	1	LS	2.50%	\$ 2,656.71
Contingency	1	LS	10%	\$ 10,626.86
Contract Administration	1	LS	8%	\$ 10,839.39
Planning/Design	1	LS	10%	\$ 13,549.24

TOTAL GENERAL CONDITIONS \$ 53,612.49**TOTAL RENOVATION INTO JNCOQ \$ 159,881.05****O&M Estimate for 50 years \$ 1,946,635.81**

BUILDING 1559

Total Building Square Footage 3,041

	Total Units	Units	Cost Per Unit	Total
BUILDING RENOVATIONS AND ADDITIONS				
Bedroom 4	189	SF	\$ 110.00	\$ 20,790.00
Kitchen	74	SF	\$ 135.00	\$ 9,990.00
Dining	58	SF	\$ 110.00	\$ 6,380.00
Secondary Dining Room	74	SF	\$ 110.00	\$ 8,140.00
Bath 2	22	SF	\$ 145.00	\$ 3,190.00
Bedroom Closet	34	SF	\$ 110.00	\$ 3,740.00
Entry/Foyer - Closet	87	SF	\$ 55.00	\$ 4,785.00
Exterior Storage	87	SF	\$ 85.00	\$ 7,395.00
Fiberoptic Communication Line	1	Allow	\$ 1,500.00	\$ 1,500.00
TOTAL BUILDING RENOVATIONS AND ADDITIONS				\$ 65,910.00

BUILDING IMPROVEMENTS**Exterior**

Replace roofing, cornice, guttering	3200	SF	\$ 3.75	\$ 12,000.00
Attic insulation	3100	SF	\$ 0.89	\$ 2,759.00
Roof framing	980	SF	\$ 10.20	\$ 9,996.00
Painting	2000	SF	\$ 1.25	\$ 2,500.00
Replace damaged wall framing	1600	SF	\$ 8.00	\$ 12,800.00
Replace damaged wood siding	1600	SF	\$ 7.00	\$ 11,200.00
New double-hung aluminum windows	24	EA	\$ 1,200.00	\$ 28,800.00
New exterior metal door/frame	3	EA	\$ 1,800.00	\$ 5,400.00
Wall cavity fiberglass insulation	2000	SF	\$ 5.33	\$ 10,660.00
Pest extermination	1	LS	\$ 3,000.00	\$ 3,000.00

Interior

Plaster repairs	125	SF	\$ 11.20	\$ 1,400.00
Paint all previously painted surfaces	1	LS	\$ 38,000.00	\$ 38,000.00

TOTAL BUILDING IMPROVEMENTS \$ 138,515.00**GENERAL CONDITIONS**

General Conditions	1	LS	15%	\$ 30,663.75
Escalation	1	LS	2.50%	\$ 5,110.63
Contingency	1	LS	10%	\$ 20,442.50
Contract Administration	1	LS	8%	\$ 20,851.35
Planning/Design	1	LS	10%	\$ 26,064.19

TOTAL GENERAL CONDITIONS \$ 103,132.41**TOTAL RENOVATION INTO GOQ \$ 307,557.41****O&M Estimate for 50 years \$ 4,151,034.61**

BUILDING 1565

Total Building Square Footage 317

	Total Units	Units	Cost Per Unit		Total
Demolition					
Building Demolition	600	CF	\$	0.37	\$ 222.00
Utilities demolition	1	LS	\$	950.00	\$ 950.00
Earthwork	125	CF	\$	52.56	\$ 6,570.00

TOTAL DEMOLITION	\$ 7,742.00
-------------------------	--------------------

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$	1,161.30
Escalation	1	LS	2.50%	\$	193.55
Contingency	1	LS	10%	\$	774.20
Contract Administration	1	LS	8%	\$	619.36
Planning/Design	1	LS	10%	\$	774.20

TOTAL GENERAL CONDITIONS	\$ 3,522.61
---------------------------------	--------------------

DEMOLITION TOTAL	\$ 11,264.61
-------------------------	---------------------

O&M Estimate for 50 years	DEMOLISHED
--------------------------------------	-------------------

SITE UTILITIES

	Total Units	Units	Cost Per Unit		Total
SITEWORK					
Trenching/Backfilling	1710	CY	\$	24.00	\$ 41,040.00
Remove exist overhead	120	LF	\$	89.00	\$ 10,680.00
Remove transformer	1	EA	\$	2,500.00	\$ 2,500.00
DOMESTIC WATER SYSTEM					
4" Domestic water piping	1880	LF	\$	43.30	\$ 81,404.00
SANITARY SEWER					
10" Sanitary sewer piping	1880	LF	\$	15.50	\$ 29,140.00
New manhole	1	EA	\$	3,850.00	\$ 3,850.00
ELECTRICAL					
New on-grade transformer	1	EA	\$	25,000.00	\$ 25,000.00
New conductors	1	EA	\$	22,800.00	\$ 22,800.00
TOTAL UTILITY WORK					\$ 216,414.00
GENERAL CONDITIONS					
General Conditions	1	LS	15%	\$	32,462.10
Escalation	1	LS	2.50%	\$	5,410.35
Contingency	1	LS	10%	\$	21,641.40
Contract Administration	1	LS	8%	\$	22,074.23
Planning/Design	1	LS	10%	\$	27,592.79
TOTAL GENERAL CONDITIONS					\$ 109,180.86
TOTAL SITE UTILITIES					\$ 325,594.86

ARCHAEOLOGY

	Total Units	Units	Cost Per Unit		Total
Mitigation @ Utility Trenches	1	LS	\$ 375,000.00	\$	375,000.00
Mitigation @ Building Additions	1	LS	\$ 100,000.00	\$	100,000.00
Mitigation @ Staging Area	1	LS	\$ 25,000.00	\$	25,000.00
Contingency	1	LS	10%	\$	50,000.00
Contract Administration	1	LS	8%	\$	40,000.00
TOTAL ARCHAEOLOGICAL MITIGATION					\$ 590,000.00

HISTORIC AMERICAN BUILDING SURVEY

	Total Units	Units	Cost Per Unit		Total
Documentation	1	LS	\$ 77,118.96	\$	77,118.96
TOTAL HISTORIC AMERICAN BUILDING SURVEY					\$ 77,118.96

Option 5 – Renovation into JNCOQs

RENOVATION INTO JNCOQs SUMMARY

Bldg 1551	No Work
Bldg 1552	No Work
Bldg 1553	No Work
Bldg 1555	No Work
Bldg 1556	\$ 184,307.27
Bldg 1557	\$ 180,510.66
Bldg 1558	\$ 160,219.56
Bldg 1559	\$ 267,372.22
Bldg 1561	No Work
Bldg 1562	No Work
Bldg 1564	No Work
Bldg 1565	\$ 11,264.61
Utilities	\$ 325,594.86
Archaeology	\$ 472,000.00
HABS Documentation	\$ 77,118.96
Site Improvements	No Work
TOTAL	\$ 1,678,388.14
O&M ESTIMATE FOR 50 YEARS	\$ 19,425,110.36

BUILDING 1556

Total Gross Square Footage 2,483

	Total Units	Units	Cost Per Unit	Total
BUILDING RENOVATIONS AND ADDITIONS				
Entry/Foyer & Closet	92.5	SF	\$ 55.00	\$ 5,087.50
Bedroom Closet	30	SF	\$ 55.00	\$ 1,650.00
Interior Storage Addition	40	SF	\$ 110.00	\$ 4,400.00
TOTAL BUILDING RENOVATIONS AND ADDITIONS				\$ 11,137.50

BUILDING IMPROVEMENTS**Exterior**

Replace roofing	2500	SF	\$ 1.85	\$ 4,625.00
Painting	2550	SF	\$ 1.25	\$ 3,187.50
Replace wall framing	1075	SF	\$ 8.00	\$ 8,600.00
Replace wood siding	1075	SF	\$ 7.00	\$ 7,525.00
New double-hung aluminum windows	30	EA	\$ 1,200.00	\$ 36,000.00
New exterior metal door/frame	5	EA	\$ 1,800.00	\$ 9,000.00
Wall cavity fiberglass insulation	2100	SF	\$ 5.33	\$ 11,193.00
Repair brick masonry chimney	260	SF	\$ 6.10	\$ 1,586.00
Pest extermination	1	LS	\$ 3,000.00	\$ 3,000.00

Interior

Repair dining room deflected floor	240	SF	\$ 10.00	\$ 2,400.00
Plaster repairs	200	SF	\$ 11.20	\$ 2,240.00
Paint previously painted surfaces	1	LS	\$ 7,400.00	\$ 7,400.00
Replace kitchen casework	14	LF	\$ 365.00	\$ 5,110.00
Replace bathroom fixtures	1	Room	\$ 8,500.00	\$ 8,500.00
Replace bathroom accessories	2	Room	\$ 500.00	\$ 1,000.00

Total Building Improvements - Interior	\$ 111,366.50
---	----------------------

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$ 18,375.60
Escalation	1	LS	2.50%	\$ 3,062.60
Contingency	1	LS	10%	\$ 12,250.40
Contract Administration	1	LS	8%	\$ 12,495.41
Planning/Design	1	LS	10%	\$ 15,619.26

TOTAL GENERAL CONDITIONS	\$ 61,803.27
---------------------------------	---------------------

TOTAL RENOVATION INTO JNCOQ	\$ 184,307.27
------------------------------------	----------------------

O&M Estimate for 50 years	\$ 3,433,189.08
--------------------------------------	------------------------

BUILDING 1557

Total Gross Square Footage 1,545

	Total Units	Units	Cost Per Unit	Total
BUILDING RENOVATIONS AND ADDITIONS				
Master Bedroom addition	53	SF	\$ 110.00	\$ 5,830.00
Kitchen Addition	80	SF	\$ 135.00	\$ 10,800.00
Dining Room addition	80	SF	\$ 110.00	\$ 8,800.00
Secondary Dining Room	102	SF	\$ 110.00	\$ 11,220.00
Bath 2 Addition	45	SF	\$ 145.00	\$ 6,525.00
Bedroom Closet	35	SF	\$ 55.00	\$ 1,925.00
Interior Storage	40	SF	\$ 55.00	\$ 2,200.00
Exterior Storage Addition	40	SF	\$ 85.00	\$ 3,400.00
TOTAL BUILDING RENOVATIONS AND ADDITIONS				\$ 50,700.00

BUILDING IMPROVEMENTS**Exterior**

Replace roofing	1700	SF	\$ 1.85	\$ 3,145.00
Painting	1550	SF	\$ 1.25	\$ 1,937.50
Replace wall framing	820	SF	\$ 8.00	\$ 6,560.00
Replace wood siding	820	SF	\$ 7.00	\$ 5,740.00
New double-hung aluminum windows	22	EA	\$ 1,200.00	\$ 26,400.00
New exterior metal door/frame	3	EA	\$ 1,800.00	\$ 5,400.00
Wall cavity fiberglass insulation	1600	SF	\$ 5.33	\$ 8,528.00
Pest extermination	1	LS	\$ 3,000.00	\$ 3,000.00

Interior

Repair dining room deflected floor	95	SF	\$ 10.00	\$ 950.00
Plaster repairs	100	SF	\$ 11.20	\$ 1,120.00
Paint previously painted surfaces	1	LS	\$ 6,500.00	\$ 6,500.00

TOTAL BUILDING IMPROVEMENTS \$ 69,280.50**GENERAL CONDITIONS**

General Conditions	1	LS	15%	\$ 17,997.08
Escalation	1	LS	2.50%	\$ 2,999.51
Contingency	1	LS	10%	\$ 11,998.05
Contract Administration	1	LS	8%	\$ 12,238.01
Planning/Design	1	LS	10%	\$ 15,297.51

TOTAL GENERAL CONDITIONS \$ 60,530.16**TOTAL RENOVATION INTO JNCOQ \$ 180,510.66****O&M Estimate for 50 years \$ 2,173,398.14**

BUILDING 1558

Total Gross Square Footage 1,410

	Total Units	Units	Cost Per Unit	Total
BUILDING RENOVATIONS AND ADDITIONS				
Secondary Dining Room Addition	45	SF	\$ 110.00	\$ 4,950.00
Bath 2	65	SF	\$ 145.00	\$ 9,425.00
Bedroom Closet	34	SF	\$ 110.00	\$ 3,740.00
Interior Storage	58	SF	\$ 110.00	\$ 6,380.00
Exterior Storage Addition	58	SF	\$ 85.00	\$ 4,930.00

TOTAL BUILDING RENOVATIONS AND ADDITIONS	\$ 29,425.00
---	---------------------

BUILDING IMPROVEMENTS**Exterior**

Replace roofing	1700	SF	\$ 1.85	\$ 3,145.00
Painting	2000	SF	\$ 1.25	\$ 2,500.00
Replace wall framing	1000	SF	\$ 8.00	\$ 8,000.00
Replace wood siding	1000	SF	\$ 7.00	\$ 7,000.00
New double-hung aluminum windows	24	EA	\$ 1,200.00	\$ 28,800.00
New exterior metal door/frame	3	EA	\$ 1,800.00	\$ 5,400.00
Wall cavity fiberglass insulation	2000	SF	\$ 5.33	\$ 10,660.00
Pest extermination	1	LS	\$ 3,000.00	\$ 3,000.00

Interior

Plaster repairs	110	SF	\$ 11.20	\$ 1,232.00
Paint all previously painted surfaces	1	LS	\$ 5,400.00	\$ 5,400.00
Replace porch deflected floor	172	SF	\$ 11.23	\$ 1,931.56

TOTAL BUILDING IMPROVEMENTS	\$ 77,068.56
------------------------------------	---------------------

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$ 15,974.03
Escalation	1	LS	2.50%	\$ 2,662.34
Contingency	1	LS	10%	\$ 10,649.36
Contract Administration	1	LS	8%	\$ 10,862.34
Planning/Design	1	LS	10%	\$ 13,577.93

TOTAL GENERAL CONDITIONS	\$ 53,726.00
---------------------------------	---------------------

TOTAL RENOVATION INTO JNCOQ	\$ 160,219.56
------------------------------------	----------------------

O&M Estimate for 50 years	\$ 1,946,635.81
--------------------------------------	------------------------

BUILDING 1559

Total Gross Square Footage 3,041

	Total Units	Units	Cost Per Unit	Total
BUILDING RENOVATIONS AND ADDITIONS				
Kitchen Addition	74	SF	\$ 135.00	\$ 9,990.00
Secondary Dining	74	SF	\$ 55.00	\$ 4,070.00
Bath 2	22	SF	\$ 95.00	\$ 2,090.00
Bedroom Closet	34	SF	\$ 55.00	\$ 1,870.00
Entry/Foyer - Closet	87	SF	\$ 55.00	\$ 4,785.00
Exterior Storage	87	SF	\$ 85.00	\$ 7,395.00
TOTAL BUILDING RENOVATIONS AND ADDITIONS				\$ 30,200.00

BUILDING IMPROVEMENTS**Exterior**

Replace roofing, cornice, guttering	3200	SF	\$ 3.75	\$ 12,000.00
Attic insulation	3100	SF	\$ 0.89	\$ 2,759.00
Roof framing	980	SF	\$ 10.20	\$ 9,996.00
Painting	2000	SF	\$ 1.25	\$ 2,500.00
Replace damaged wall framing	1600	SF	\$ 8.00	\$ 12,800.00
Replace damaged wood siding	1600	SF	\$ 7.00	\$ 11,200.00
New double-hung aluminum windows	24	EA	\$ 1,200.00	\$ 28,800.00
New exterior metal door/frame	3	EA	\$ 1,800.00	\$ 5,400.00
Wall cavity fiberglass insulation	2000	SF	\$ 5.33	\$ 10,660.00
Pest extermination	1	LS	\$ 3,000.00	\$ 3,000.00

Interior

Plaster repairs	125	SF	\$ 11.20	\$ 1,400.00
Paint all previously painted surfaces	1	LS	\$ 38,000.00	\$ 38,000.00
Replace bathroom fixtures	1	Room	\$ 8,500.00	\$ 8,500.00
Replace bathroom accessories	1	Room	\$ 500.00	\$ 500.00

Total Building Improvements				\$ 147,515.00
------------------------------------	--	--	--	----------------------

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$ 26,657.25
Escalation	1	LS	2.50%	\$ 4,442.88
Contingency	1	LS	10%	\$ 17,771.50
Contract Administration	1	LS	8%	\$ 18,126.93
Planning/Design	1	LS	10%	\$ 22,658.66

TOTAL GENERAL CONDITIONS				\$ 89,657.22
---------------------------------	--	--	--	---------------------

TOTAL RENOVATION INTO JNCOQ				\$ 267,372.22
------------------------------------	--	--	--	----------------------

O&M Estimate for 50 years				\$ 4,151,034.61
--------------------------------------	--	--	--	------------------------

BUILDING 1565

Total Gross Square Footage 317

	Total Units	Units	Cost Per Unit		Total
Demolition					
Building Demolition	600	CF	\$	0.37	\$ 222.00
UtilIties demolition	1	LS	\$	950.00	\$ 950.00
Earthwork	125	CF	\$	52.56	\$ 6,570.00

TOTAL DEMOLITION	\$ 7,742.00
-------------------------	--------------------

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$	1,161.30
Escalation	1	LS	2.50%	\$	193.55
Contingency	1	LS	10%	\$	774.20
Contract Administration	1	LS	8%	\$	619.36
Planning/Design	1	LS	10%	\$	774.20

TOTAL GENERAL CONDITIONS	\$ 3,522.61
---------------------------------	--------------------

DEMOLITION TOTAL	\$ 11,264.61
-------------------------	---------------------

O&M Estimate for 50 years	DEMOLISHED
--------------------------------------	-------------------

SITE UTILITIES

	Total Units	Units	Cost Per Unit	Total
SITEWORK				
Trenching/Backfilling	1710	CY	\$ 24.00	\$ 41,040.00
Remove exist overhead	120	LF	\$ 89.00	\$ 10,680.00
Remove transformer	1	EA	\$ 2,500.00	\$ 2,500.00
DOMESTIC WATER SYSTEM				
4" Domestic water piping	1880	LF	\$ 43.30	\$ 81,404.00
SANITARY SEWER				
10" Sanitary sewer piping	1880	LF	\$ 15.50	\$ 29,140.00
New manhole	1	EA	\$ 3,850.00	\$ 3,850.00
ELECTRICAL				
New on-grade transformer	1	EA	\$ 25,000.00	\$ 25,000.00
New conductors	1	EA	\$ 22,800.00	\$ 22,800.00
TOTAL UTILITY WORK				\$ 216,414.00
GENERAL CONDITIONS				
General Conditions	1	LS	15%	\$ 32,462.10
Escalation	1	LS	2.50%	\$ 5,410.35
Contingency	1	LS	10%	\$ 21,641.40
Contract Administration	1	LS	8%	\$ 22,074.23
Planning/Design	1	LS	10%	\$ 27,592.79
TOTAL GENERAL CONDITIONS				\$ 109,180.86
TOTAL SITE UTILITIES				\$ 325,594.86

ARCHAEOLOGY

	Total Units	Units	Cost Per Unit		Total
Mitigation @ Utility Trenches	1	LS	\$ 375,000.00	\$	375,000.00
Mitigation @ Staging Area	1	LS	\$ 25,000.00	\$	25,000.00
Contingency	1	LS	10%	\$	40,000.00
Contract Administration	1	LS	8%	\$	32,000.00
TOTAL ARCHAEOLOGICAL MITIGATION					\$ 472,000.00

HISTORIC AMERICAN BUILDING SURVEY

	Total Units	Units	Cost Per Unit		Total
Documentation	1	LS	\$ 77,118.96	\$	77,118.96
TOTAL HISTORIC AMERICAN BUILDING SURVEY					\$ 77,118.96

Option 6 – Maintain Existing Quarters

MAINTAIN EXISTING QUARTERS SUMMARY

Bldg 1551	No Work
Bldg 1552	No Work
Bldg 1553	No Work
Bldg 1555	No Work
Bldg 1556	\$ 141,959.35
Bldg 1557	\$ 100,095.14
Bldg 1558	\$ 104,919.32
Bldg 1559	\$ 96,456.50
Bldg 1561	No Work
Bldg 1562	No Work
Bldg 1564	No Work
Bldg 1565	No Work
Utilities	No Work
Archaeology	No Work
HABS Documentation	No Work
Site Improvements	No Work
TOTAL	\$ 443,430.31
O&M ESTIMATE FOR 50 YEARS	\$ 21,603,007.16

BUILDING 1556

Total Gross Square Footage 2,483

	Total Units	Units	Cost Per Unit	Total
BUILDING IMPROVEMENTS				
Exterior				
Replace roofing	2500	SF	\$ 1.85	\$ 4,625.00
Painting	2550	SF	\$ 1.25	\$ 3,187.50
Replace damaged wall framing	1075	SF	\$ 8.00	\$ 8,600.00
Replace damaged wood siding	1075	SF	\$ 7.00	\$ 7,525.00
New double-hung aluminum windows	30	EA	\$ 1,200.00	\$ 36,000.00
New exterior metal door/frame	5	EA	\$ 1,800.00	\$ 9,000.00
Wall cavity fiberglass insulation	2100	SF	\$ 5.33	\$ 11,193.00
Repair brick masonry chimney	260	SF	\$ 6.10	\$ 1,586.00
Pest extermination	1	LS	\$ 3,000.00	\$ 3,000.00
Interior				
Plaster repairs	200	SF	\$ 11.20	\$ 2,240.00
Paint previously painted surfaces	1	LS	\$ 7,400.00	\$ 7,400.00
TOTAL BUILDING IMPROVEMENTS				\$ 94,356.50
GENERAL CONDITIONS				
General Conditions	1	LS	15%	\$ 14,153.48
Escalation	1	LS	2.50%	\$ 2,358.91
Contingency	1	LS	10%	\$ 9,435.65
Contract Administration	1	LS	8%	\$ 9,624.36
Planning/Design	1	LS	10%	\$ 12,030.45
TOTAL GENERAL CONDITIONS				\$ 47,602.85
TOTAL RENOVATION TO MAINTAIN EXISTING				\$ 141,959.35
O&M Estimate for 50 years				\$ 3,945,413.54

BUILDING 1557

Total Gross Square Footage 1,545

	Total Units	Units	Cost Per Unit	Total
BUILDING IMPROVEMENTS				
Exterior				
Replace roofing	1700	SF	\$ 1.85	\$ 3,145.00
Painting	1550	SF	\$ 1.25	\$ 1,937.50
Replace wall framing	820	SF	\$ 8.00	\$ 6,560.00
Replace wood siding	820	SF	\$ 7.00	\$ 5,740.00
New double-hung aluminum windows	22	EA	\$ 1,200.00	\$ 26,400.00
New exterior metal door/frame	2	EA	\$ 1,800.00	\$ 3,600.00
Wall cavity fiberglass insulation	1600	SF	\$ 5.33	\$ 8,528.00
Pest extermination	1	LS	\$ 3,000.00	\$ 3,000.00
Interior				
Plaster repairs	100	SF	\$ 11.20	\$ 1,120.00
Paint previously painted surfaces	1	LS	\$ 6,500.00	\$ 6,500.00
TOTAL BUILDING IMPROVEMENTS				\$ 66,530.50
GENERAL CONDITIONS				
General Conditions	1	LS	15%	\$ 9,979.58
Escalation	1	LS	2.50%	\$ 1,663.26
Contingency	1	LS	10%	\$ 6,653.05
Contract Administration	1	LS	8%	\$ 6,786.11
Planning/Design	1	LS	10%	\$ 8,482.64
TOTAL GENERAL CONDITIONS				\$ 33,564.64
TOTAL RENOVATION TO MAINTAIN EXISTING				\$ 100,095.14
O&M Estimate for 50 years				\$ 2,492,120.17

BUILDING 1558

Total Gross Square Footage 1,410

	Total Units	Units	Cost Per Unit	Total
BUILDING IMPROVEMENTS				
Exterior				
Replace roofing	1700	SF	\$ 1.85	\$ 3,145.00
Painting	2000	SF	\$ 1.25	\$ 2,500.00
Replace damaged wall framing	1000	SF	\$ 8.00	\$ 8,000.00
Replace damaged wood siding	1000	SF	\$ 7.00	\$ 7,000.00
New double-hung aluminum windows	24	EA	\$ 1,200.00	\$ 28,800.00
Wall cavity fiberglass insulation	2000	SF	\$ 5.33	\$ 10,660.00
Pest extermination	1	LS	\$ 3,000.00	\$ 3,000.00
Interior				
Plaster repairs	110	SF	\$ 11.20	\$ 1,232.00
Paint all previously painted surfaces	1	LS	\$ 5,400.00	\$ 5,400.00
Total Building Improvements - Interior				\$ 69,737.00
GENERAL CONDITIONS				
General Conditions	1	LS	15%	\$ 10,460.55
Escalation	1	LS	2.50%	\$ 1,743.43
Contingency	1	LS	10%	\$ 6,973.70
Contract Administration	1	LS	8%	\$ 7,113.17
Planning/Design	1	LS	10%	\$ 8,891.47
TOTAL GENERAL CONDITIONS				\$ 35,182.32
TOTAL RENOVATION TO MAINTAIN EXISTING				\$ 104,919.32
O&M Estimate for 50 years				\$ 2,237,508.34

BUILDING 1559

Total Gross Square Footage 3,041

	Total Units	Units	Cost Per Unit	Total
BUILDING IMPROVEMENTS				
Exterior				
Replace roofing, cornice, guttering	3200	SF	\$ 3.75	\$ 12,000.00
Attic insulation	3100	SF	\$ 0.89	\$ 2,759.00
Painting	2000	SF	\$ 1.25	\$ 2,500.00
Replace wall framing	1600	SF	\$ 8.00	\$ 12,800.00
Replace wood siding	1600	SF	\$ 7.00	\$ 11,200.00
New double-hung aluminum windows	24	EA	\$ 1,200.00	\$ 28,800.00
Wall cavity fiberglass insulation	2000	SF	\$ 5.33	\$ 10,660.00
Pest extermination	1	LS	\$ 3,000.00	\$ 3,000.00
Interior				
Plaster repairs	125	SF	\$ 11.20	\$ 1,400.00
Paint all previously painted surfaces	1	LS	\$ 38,000.00	\$ 38,000.00
Furnishings	1	LS	\$ 24,712.00	\$ 24,712.00
TOTAL BUILDING IMPROVEMENTS				\$ 64,112.00
GENERAL CONDITIONS				
General Conditions	1	LS	15%	\$ 9,616.80
Escalation	1	LS	2.50%	\$ 1,602.80
Contingency	1	LS	10%	\$ 6,411.20
Contract Administration	1	LS	8%	\$ 6,539.42
Planning/Design	1	LS	10%	\$ 8,174.28
TOTAL GENERAL CONDITIONS				\$ 32,344.50
TOTAL RENOVATION TO MAINTAIN EXISTING				\$ 96,456.50
O&M Estimate for 50 years				\$ 4,778,370.33

This page left intentionally blank.

Option 7 – Mothballing

MOTHBALLING SUMMARY

Bldg 1551	\$	10,343.44
Bldg 1552	\$	13,262.17
Bldg 1553	\$	7,434.11
Bldg 1555	\$	11,757.67
Bldg 1556	\$	15,103.30
Bldg 1557	\$	17,726.77
Bldg 1558	\$	18,873.95
Bldg 1559	\$	23,003.81
Bldg 1561		No Work
Bldg 1562	\$	24,997.27
Bldg 1564	\$	15,028.07
Bldg 1565	\$	1,175.39
Utilities		No Work
Archaeology		No Work
HABS Documentation	\$	77,118.96
Site Improvements		No Work
TOTAL	\$	235,824.90
O&M ESTIMATE FOR 10 YEARS	\$	395,620.44

MOTHBALL EXISTING BUILDINGS

	Total Units	Units	Cost Per Unit	Total
BUILDING 1551				
Total Gross Square Footage	800			
Exterior				
Paint previously painted surfaces	1200	SF	\$ 1.25	\$ 1,500.00
Repair wood siding	45	SF	\$ 7.00	\$ 315.00
Pest extermination	1	LS	\$ 3,000.00	\$ 3,000.00
Board-up windows/doors	560	SF	\$ 2.25	\$ 1,260.00
Interior				
Ventilation	1	LS	\$ 800.00	\$ 800.00
MOTHBALLING SUBTOTAL				\$ 6,875.00

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$ 1,031.25
Escalation	1	LS	2.50%	\$ 171.88
Contingency	1	LS	10%	\$ 687.50
Contract Administration	1	LS	8%	\$ 701.25
Planning/Design	1	LS	10%	\$ 876.56

TOTAL GENERAL CONDITIONS				\$ 3,468.44
---------------------------------	--	--	--	--------------------

TOTAL BUILDING 1551 MOTHBALLING				\$ 10,343.44
--	--	--	--	---------------------

O&M Estimate for 10 years				\$ 21,445.75
--------------------------------------	--	--	--	---------------------

BUILDING 1552

Total Gross Square Footage 2,070

Exterior				
Paint previously painted surfaces	3200	SF	\$ 1.25	\$ 4,000.00
Repair wood siding	85	SF	\$ 7.00	\$ 595.00
Pest extermination	1	LS	\$ 3,000.00	\$ 3,000.00
Board-up windows/doors	320	SF	\$ 2.25	\$ 720.00
Interior				
Ventilation	1	LS	\$ 500.00	\$ 500.00
MOTHBALLING SUBTOTAL				\$ 8,815.00

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$ 1,322.25
Escalation	1	LS	2.50%	\$ 220.38
Contingency	1	LS	10%	\$ 881.50
Contract Administration	1	LS	8%	\$ 899.13
Planning/Design	1	LS	10%	\$ 1,123.91

TOTAL GENERAL CONDITIONS				\$ 4,447.17
---------------------------------	--	--	--	--------------------

TOTAL BUILDING 1552 MOTHBALLING				\$ 13,262.17
--	--	--	--	---------------------

O&M Estimate for 10 years				\$ 55,490.87
--------------------------------------	--	--	--	---------------------

BUILDING 1553

Total Gross Square Footage 210

Exterior

Paint previously painted surfaces	800	SF	\$	1.25	\$	1,000.00
Repair wood siding	55	SF	\$	7.00	\$	385.00
Pest extermination	1	LS	\$	3,000.00	\$	3,000.00
Board-up windows/doors	25	SF	\$	2.25	\$	56.25

Interior

Ventilation	1	LS	\$	500.00	\$	500.00
-------------	---	----	----	--------	----	--------

MOTHBALLING SUBTOTAL	\$	4,941.25
-----------------------------	-----------	-----------------

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$	741.19
Escalation	1	LS	2.50%	\$	123.53
Contingency	1	LS	10%	\$	494.13
Contract Administration	1	LS	8%	\$	504.01
Planning/Design	1	LS	10%	\$	630.01

TOTAL GENERAL CONDITIONS	\$	2,492.86
---------------------------------	-----------	-----------------

TOTAL BUILDING 1553 MOTHBALLING	\$	7,434.11
--	-----------	-----------------

O&M Estimate for 10 years	\$	5,629.51
--------------------------------------	-----------	-----------------

BUILDING 1555

Total Gross Square Footage 960

Exterior

Paint previous painted surfaces	2180	SF	\$	1.25	\$	2,725.00
Repair wood siding	60	SF	\$	7.00	\$	420.00
Pest extermination	1	LS	\$	3,000.00	\$	3,000.00
Board-up windows/doors	320	SF	\$	2.25	\$	720.00

Interior

Drain all plumbing	1	LS	\$	450.00	\$	450.00
Ventilation	1	LS	\$	500.00	\$	500.00

MOTHBALLING SUBTOTAL	\$	7,815.00
-----------------------------	-----------	-----------------

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$	1,172.25
Escalation	1	LS	2.50%	\$	195.38
Contingency	1	LS	10%	\$	781.50
Contract Administration	1	LS	8%	\$	797.13
Planning/Design	1	LS	10%	\$	996.41

TOTAL GENERAL CONDITIONS	\$	3,942.67
---------------------------------	-----------	-----------------

TOTAL BUILDING 1555 MOTHBALLING	\$	11,757.67
--	-----------	------------------

O&M Estimate for 10 years	\$	25,734.90
--------------------------------------	-----------	------------------

BUILDING 1556

Total Gross Square Footage 2,483

Exterior

Paint previously painted surfaces	2550	SF	\$	1.25	\$	3,187.50
Repair wood siding	85	SF	\$	7.00	\$	595.00
Pest extermination	1	LS	\$	3,000.00	\$	3,000.00
Board-up windows/doors	225	SF	\$	2.25	\$	506.25

Interior

Drain all plumbing	1	LS	\$	450.00	\$	450.00
Ventilation	1	LS	\$	1,200.00	\$	1,200.00
Modify HVAC system	1	LS	\$	1,100.00	\$	1,100.00

MOTHBALLING SUBTOTAL \$ 10,038.75**GENERAL CONDITIONS**

General Conditions	1	LS	15%	\$	1,505.81
Escalation	1	LS	2.50%	\$	250.97
Contingency	1	LS	10%	\$	1,003.88
Contract Administration	1	LS	8%	\$	1,023.95
Planning/Design	1	LS	10%	\$	1,279.94

TOTAL GENERAL CONDITIONS \$ 5,064.55**TOTAL BUILDING 1556 MOTHBALLING \$ 15,103.30****O&M Estimate for 10 years \$ 66,562.24****BUILDING 1557**

Total Gross Square Footage 1,545

Exterior

Paint previously painted surfaces	1550	SF	\$	1.25	\$	1,937.50
Repair wood siding	85	SF	\$	7.00	\$	595.00
Pest extermination	1	LS	\$	3,000.00	\$	3,000.00
Board-up windows/doors	1600	SF	\$	2.25	\$	3,600.00

Interior

Drain all plumbing	1	LS	\$	450.00	\$	450.00
Ventilation	1	LS	\$	1,200.00	\$	1,200.00
Modify HVAC system	1	LS	\$	1,000.00	\$	1,000.00

MOTHBALLING SUBTOTAL \$ 11,782.50**GENERAL CONDITIONS**

General Conditions	1	LS	15%	\$	1,767.38
Escalation	1	LS	2.50%	\$	294.56
Contingency	1	LS	10%	\$	1,178.25
Contract Administration	1	LS	8%	\$	1,201.82
Planning/Design	1	LS	10%	\$	1,502.27

TOTAL GENERAL CONDITIONS \$ 5,944.27**TOTAL BUILDING 1557 MOTHBALLING \$ 17,726.77****O&M Estimate for 10 years \$ 41,417.10**

BUILDING 1558

Total Gross Square Footage 1,410

Exterior

Paint previously painted surfaces	2000	SF	\$	1.25	\$	2,500.00
Repair wood siding	85	SF	\$	7.00	\$	595.00
Pest extermination	1	LS	\$	3,000.00	\$	3,000.00
Board-up windows/doors	1600	SF	\$	2.25	\$	3,600.00

Interior

Drain all plumbing	1	LS	\$	450.00	\$	450.00
Ventilation	1	LS	\$	1,200.00	\$	1,200.00
Modify HVAC system	1	LS	\$	1,200.00	\$	1,200.00

MOTHBALLING SUBTOTAL \$ 12,545.00**GENERAL CONDITIONS**

General Conditions	1	LS	15%	\$	1,881.75
Escalation	1	LS	2.50%	\$	313.63
Contingency	1	LS	10%	\$	1,254.50
Contract Administration	1	LS	8%	\$	1,279.59
Planning/Design	1	LS	10%	\$	1,599.49

TOTAL GENERAL CONDITIONS \$ 6,328.95**TOTAL BUILDING 1558 MOTHBALLING \$ 18,873.95****O&M Estimate for 10 years \$ 37,798.13****BUILDING 1559**

Total Gross Square Footage 3,041

Exterior

Paint previously painted surfaces	2300	SF	\$	1.25	\$	2,875.00
Repair wood siding	320	SF	\$	7.00	\$	2,240.00
Pest extermination	1	LS	\$	3,000.00	\$	3,000.00
Board-up windows/doors	1820	SF	\$	2.25	\$	4,095.00

Interior

Drain all plumbing	1	LS	\$	450.00	\$	450.00
Ventilation	1	LS	\$	1,200.00	\$	1,200.00
Modify HVAC system	1	LS	\$	1,430.00	\$	1,430.00

MOTHBALLING SUBTOTAL \$ 15,290.00**GENERAL CONDITIONS**

General Conditions	1	LS	15%	\$	2,293.50
Escalation	1	LS	2.50%	\$	382.25
Contingency	1	LS	10%	\$	1,529.00
Contract Administration	1	LS	8%	\$	1,559.58
Planning/Design	1	LS	10%	\$	1,949.48

TOTAL GENERAL CONDITIONS \$ 7,713.81**TOTAL BUILDING 1559 MOTHBALLING \$ 23,003.81****O&M Estimate for 10 years \$ 81,520.65**

Building 1562

Total Gross Square Footage 432

EXTERIOR

Paint previously painted surfaces	9300	SF	\$	1.25	\$	11,625.00
Repair wood siding	110	SF	\$	7.00	\$	770.00
Pest extermination	1	LS	\$	3,000.00	\$	3,000.00
Board-up windows/doors	320	SF	\$	2.25	\$	720.00

INTERIOR

Ventilation	1	LS	\$	500.00	\$	500.00
-------------	---	----	----	--------	----	--------

MOTHBALLING SUBTOTAL	\$	16,615.00
-----------------------------	-----------	------------------

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$	2,492.25
Escalation	1	LS	2.50%	\$	415.38
Contingency	1	LS	10%	\$	1,661.50
Contract Administration	1	LS	8%	\$	1,694.73
Planning/Design	1	LS	10%	\$	2,118.41

TOTAL GENERAL CONDITIONS	\$	8,382.27
---------------------------------	-----------	-----------------

TOTAL BUILDING 1562 MOTHBALLING	\$	24,997.27
--	-----------	------------------

O&M Estimate for 10 years	\$	11,580.70
--------------------------------------	-----------	------------------

Building 1564

Total Gross Square Footage 720

EXTERIOR

Paint previously painted surfaces	2310	SF	\$	1.25	\$	2,887.50
Repair wood siding	200	SF	\$	7.00	\$	1,400.00
Pest extermination	1	LS	\$	3,000.00	\$	3,000.00
Board-up windows/doors	245	SF	\$	2.25	\$	551.25

INTERIOR

Drain all plumbing	1	LS	\$	450.00	\$	450.00
Ventilation	1	LS	\$	1,200.00	\$	1,200.00
Modify HVAC system	1	LS	\$	500.00	\$	500.00

MOTHBALLING SUBTOTAL	\$	9,988.75
-----------------------------	-----------	-----------------

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$	1,498.31
Escalation	1	LS	2.50%	\$	249.72
Contingency	1	LS	10%	\$	998.88
Contract Administration	1	LS	8%	\$	1,018.85
Planning/Design	1	LS	10%	\$	1,273.57

TOTAL GENERAL CONDITIONS	\$	5,039.32
---------------------------------	-----------	-----------------

TOTAL BUILDING 1564 MOTHBALLING	\$	15,028.07
--	-----------	------------------

O&M Estimate for 10 years	\$	19,301.17
--------------------------------------	-----------	------------------

BUILDING 1565

Total Building Square Footage 317

	Total Units	Units	Cost Per Unit		Total
EXTERIOR					
Paint previously painted surfaces	265	SF	\$	1.25	\$ 331.25
TOTAL EXTERIOR					\$ 331.25

MECHANICAL - PLUMBING

Drain all piping and disconnect pumps	1	LS	\$	450.00	\$ 450.00
TOTAL MECHANICAL - PLUMBING					\$ 450.00

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$	117.19
Escalation	1	LS	2.50%	\$	19.53
Contingency	1	LS	10%	\$	78.13
Contract Administration	1	LS	8%	\$	79.69
Planning/Design	1	LS	10%	\$	99.61
TOTAL GENERAL CONDITIONS					\$ 394.14

TOTAL MOTHBALLING					\$ 1,175.39
--------------------------	--	--	--	--	--------------------

O&M Estimate for 10 years					\$ 8,497.88
--------------------------------------	--	--	--	--	--------------------

HISTORIC AMERICAN BUILDING SURVEY

	Total Units	Units	Cost Per Unit		Total
Documentation	1	LS	\$	77,118.96	\$ 77,118.96
TOTAL HISTORIC AMERICAN BUILDING SURVEY					\$ 77,118.96

This page intentionally left blank.

Option 8 – Demolition and New Construction

DEMOLITION AND NEW CONSTRUCTION SUMMARY

Bldg 1551	\$	18,469.24
Bldg 1552	\$	23,535.19
Bldg 1553	\$	5,454.11
Bldg 1555	\$	24,667.12
Bldg 1556	\$	39,384.62
Bldg 1557	\$	28,506.92
Bldg 1558	\$	29,011.00
Bldg 1559	\$	44,533.44
Bldg 1561		No Work
Bldg 1562	\$	6,802.93
Bldg 1564	\$	21,999.10
Bldg 1565	\$	11,264.61
Two New SOQs	\$	719,500.04
New GOQ	\$	490,948.44
Utilities	\$	325,594.86
Archaeology	\$	1,413,295.44
HABS Documentation	\$	77,118.96
Site Improvements	\$	112,470.00
TOTAL	\$	3,392,556.04
O&M ESTIMATE FOR 50 YEARS	\$	18,015,615.77

DEMOLITION

	Total Units	Units	Cost Per Unit	Total
BUILDING 1551				
Total Gross Square Footage	800			
Demolition				
Building Demolition	16000	CF	\$ 0.37	\$ 5,920.00
Utilities demolition	1	LS	\$ 1,100.00	\$ 1,100.00
Earthwork	100	CF	\$ 52.56	\$ 5,256.00
TOTAL DEMOLITION				\$ 12,276.00

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$ 1,841.40
Escalation	1	LS	2.50%	\$ 306.90
Contingency	1	LS	10%	\$ 1,227.60
Contract Administration	1	LS	8%	\$ 1,252.15
Planning/Design	1	LS	10%	\$ 1,565.19
TOTAL GENERAL CONDITIONS				\$ 6,193.24

TOTAL BUILDING 1551 DEMOLITION				\$ 18,469.24
---------------------------------------	--	--	--	---------------------

BUILDING 1552

Total Gross Square Footage 2,070

Demolition				
Building Demolition	23680	CF	\$ 0.37	\$ 8,761.60
Utilities demolition	1	LS	\$ 1,100.00	\$ 1,100.00
Earthwork	110	CF	\$ 52.56	\$ 5,781.60
TOTAL DEMOLITION				\$ 15,643.20

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$ 2,346.48
Escalation	1	LS	2.50%	\$ 391.08
Contingency	1	LS	10%	\$ 1,564.32
Contract Administration	1	LS	8%	\$ 1,595.61
Planning/Design	1	LS	10%	\$ 1,994.51
TOTAL GENERAL CONDITIONS				\$ 7,891.99

TOTAL BUILDING 1552 DEMOLITION				\$ 23,535.19
---------------------------------------	--	--	--	---------------------

BUILDING 1553

Total Gross Square Footage 210

Demolition

Building Demolition	4320	CF	\$	0.37	\$	1,598.40
Utilities demolition	1	LS	\$	450.00	\$	450.00
Earthwork	30	CF	\$	52.56	\$	1,576.80

TOTAL DEMOLITION	\$	3,625.20
-------------------------	-----------	-----------------

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$	543.78
Escalation	1	LS	2.50%	\$	90.63
Contingency	1	LS	10%	\$	362.52
Contract Administration	1	LS	8%	\$	369.77
Planning/Design	1	LS	10%	\$	462.21

TOTAL GENERAL CONDITIONS	\$	1,828.91
---------------------------------	-----------	-----------------

TOTAL BUILDING 1553 DEMOLITION	\$	5,454.11
---------------------------------------	-----------	-----------------

BUILDING 1555

Total Gross Square Footage 960

Demolition

Building Demolition	22020	CF	\$	0.37	\$	8,147.40
Utilities demolition	1	LS	\$	1,100.00	\$	1,100.00
Earthwork	136	CF	\$	52.56	\$	7,148.16

TOTAL DEMOLITION	\$	16,395.56
-------------------------	-----------	------------------

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$	2,459.33
Escalation	1	LS	2.50%	\$	409.89
Contingency	1	LS	10%	\$	1,639.56
Contract Administration	1	LS	8%	\$	1,672.35
Planning/Design	1	LS	10%	\$	2,090.43

TOTAL GENERAL CONDITIONS	\$	8,271.56
---------------------------------	-----------	-----------------

TOTAL BUILDING 1555 DEMOLITION	\$	24,667.12
---------------------------------------	-----------	------------------

BUILDING 1556

Total Gross Square Footage 2,483

Demolition

Building Demolition	36100	CF	\$	0.37	\$	13,357.00
Utilities demolition	1	LS	\$	1,100.00	\$	1,100.00
Earthwork	223	CF	\$	52.56	\$	11,720.88

TOTAL DEMOLITION	\$	26,177.88
-------------------------	-----------	------------------

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$	3,926.68
Escalation	1	LS	2.50%	\$	654.45
Contingency	1	LS	10%	\$	2,617.79
Contract Administration	1	LS	8%	\$	2,670.14
Planning/Design	1	LS	10%	\$	3,337.68

TOTAL GENERAL CONDITIONS	\$	13,206.74
---------------------------------	-----------	------------------

TOTAL BUILDING 1556 DEMOLITION	\$	39,384.62
---------------------------------------	-----------	------------------

BUILDING 1557

Total Gross Square Footage 1,545

Demolition

Building Demolition	26645	CF	\$	0.37	\$	9,858.65
Utilities demolition	1	LS	\$	1,100.00	\$	1,100.00
Earthwork	152	CF	\$	52.56	\$	7,989.12

TOTAL DEMOLITION	\$	18,947.77
-------------------------	-----------	------------------

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$	2,842.17
Escalation	1	LS	2.50%	\$	473.69
Contingency	1	LS	10%	\$	1,894.78
Contract Administration	1	LS	8%	\$	1,932.67
Planning/Design	1	LS	10%	\$	2,415.84

TOTAL GENERAL CONDITIONS	\$	9,559.15
---------------------------------	-----------	-----------------

TOTAL BUILDING 1557 DEMOLITION	\$	28,506.92
---------------------------------------	-----------	------------------

BUILDING 1558

Total Gross Square Footage 1,410

Demolition

Building Demolition	26130	CF	\$	0.37	\$	9,668.10
Utilities demolition	1	LS	\$	1,100.00	\$	1,100.00
Earthwork	162	CF	\$	52.56	\$	8,514.72

TOTAL DEMOLITION	\$	19,282.82
-------------------------	-----------	------------------

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$	2,892.42
Escalation	1	LS	2.50%	\$	482.07
Contingency	1	LS	10%	\$	1,928.28
Contract Administration	1	LS	8%	\$	1,966.85
Planning/Design	1	LS	10%	\$	2,458.56

TOTAL GENERAL CONDITIONS	\$	9,728.18
---------------------------------	-----------	-----------------

TOTAL BUILDING 1558 DEMOLITION	\$	29,011.00
---------------------------------------	-----------	------------------

BUILDING 1559

Total Gross Square Footage 3,041

Demolition

Building Demolition	36400	CF	\$	0.37	\$	13,468.00
Utilities demolition	1	LS	\$	1,100.00	\$	1,100.00
Earthwork	286	CF	\$	52.56	\$	15,032.16

TOTAL DEMOLITION	\$	29,600.16
-------------------------	-----------	------------------

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$	4,440.02
Escalation	1	LS	2.50%	\$	740.00
Contingency	1	LS	10%	\$	2,960.02
Contract Administration	1	LS	8%	\$	3,019.22
Planning/Design	1	LS	10%	\$	3,774.02

TOTAL GENERAL CONDITIONS	\$	14,933.28
---------------------------------	-----------	------------------

TOTAL BUILDING 1559 DEMOLITION	\$	44,533.44
---------------------------------------	-----------	------------------

BUILDING 1562

Total Gross Square Footage 432

Demolition

Building Demolition	9300	CF	\$	0.37	\$	3,441.00
Utilities demolition	1	LS	\$	450.00	\$	450.00
Earthwork	12	CF	\$	52.56	\$	630.72

TOTAL DEMOLITION	\$	4,521.72
-------------------------	-----------	-----------------

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$	678.26
Escalation	1	LS	2.50%	\$	113.04
Contingency	1	LS	10%	\$	452.17
Contract Administration	1	LS	8%	\$	461.22
Planning/Design	1	LS	10%	\$	576.52

TOTAL GENERAL CONDITIONS	\$	2,281.21
---------------------------------	-----------	-----------------

TOTAL BUILDING 1562 DEMOLITION	\$	6,802.93
---------------------------------------	-----------	-----------------

Building 1564

Total Gross Square Footage 720

Demolition

Building Demolition	19500	CF	\$	0.37	\$	7,215.00
Utilities demolition	1	LS	\$	1,100.00	\$	1,100.00
Earthwork	120	CF	\$	52.56	\$	6,307.20

TOTAL DEMOLITION	\$	14,622.20
-------------------------	-----------	------------------

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$	2,193.33
Escalation	1	LS	2.50%	\$	365.56
Contingency	1	LS	10%	\$	1,462.22
Contract Administration	1	LS	8%	\$	1,491.46
Planning/Design	1	LS	10%	\$	1,864.33

TOTAL GENERAL CONDITIONS	\$	7,376.90
---------------------------------	-----------	-----------------

TOTAL BUILDING 1564 DEMOLITION	\$	21,999.10
---------------------------------------	-----------	------------------

BUILDING 1565

Total Building Square Footage 317

	Total Units	Units	Cost Per Unit	Total
Demolition				
Building Demolition	600	CF	\$ 0.37	\$ 222.00
Utilities demolition	1	LS	\$ 950.00	\$ 950.00
Earthwork	125	CF	\$ 52.56	\$ 6,570.00

TOTAL DEMOLITION \$ 7,742.00**GENERAL CONDITIONS**

General Conditions	1	LS	15%	\$ 1,161.30
Escalation	1	LS	2.50%	\$ 193.55
Contingency	1	LS	10%	\$ 774.20
Contract Administration	1	LS	8%	\$ 619.36
Planning/Design	1	LS	10%	\$ 774.20

TOTAL GENERAL CONDITIONS \$ 3,522.61**DEMOLITION TOTAL \$ 11,264.61**

SENIOR OFFICER HOUSES - NEW CONSTRUCTION

	Total Units	Units	Cost Per Unit		Total
NEW SINGLE FAMILY RESIDENTIAL - CUSTOM					
Custom Residential with 2 car garage complete w/ excavation & foundation	2520	SF	\$	88.30	\$ 222,516.00
Paved driveway	1200	SF	\$	7.20	\$ 8,640.00
Utilities					
Electric service	1	LS	\$	3,800.00	\$ 3,800.00
Sanitary sewer entrance	1	LS	\$	2,210.00	\$ 2,210.00
Domestic water service	1	LS	\$	1,950.00	\$ 1,950.00
TOTAL SINGLE FAMILY RESIDENTIAL					\$ 239,116.00
NEW SINGLE FAMILY RESIDENTIAL - CUSTOM					
Custom Residential with 2 car garage complete w/ excavation & foundation	2520	SF	\$	88.30	\$ 222,516.00
Paved driveway	1200	SF	\$	7.20	\$ 8,640.00
Utilities					
Electric service	1	LS	\$	3,800.00	\$ 3,800.00
Sanitary sewer entrance	1	LS	\$	2,210.00	\$ 2,210.00
Domestic water service	1	LS	\$	1,950.00	\$ 1,950.00
TOTAL SINGLE FAMILY RESIDENTIAL					\$ 239,116.00
TOTAL CONSTRUCTION					\$ 478,232.00
GENERAL CONDITIONS					
General Conditions	1	LS	15%	\$	71,734.80
Escalation	1	LS	2.50%	\$	11,955.80
Contingency	1	LS	10%	\$	47,823.20
Contract Administration	1	LS	8%	\$	48,779.66
Planning/Design	1	LS	10%	\$	60,974.58
TOTAL GENERAL CONDITIONS					\$ 241,268.04
TOTAL TWO NEW SENIOR OFFICER HOUSES					\$ 719,500.04
O&M Estimate for 50 years					\$ 10,847,180.09

GENERAL OFFICER HOUSE - NEW CONSTRUCTION

	Total Units	Units	Cost Per Unit		Total
NEW SINGLE FAMILY RESIDENTIAL - CUSTOM					
Custom Residential with 2 car garage complete w/ excavation & foundation	3300	SF	\$ 93.40	\$	308,220.00
Paved driveway	1200	SF	\$ 7.20	\$	8,640.00
Utilities					
Electric service	1	LS	\$ 4,500.00	\$	4,500.00
Sanitary sewer entrance	1	LS	\$ 2,850.00	\$	2,850.00
Domestic water service	1	LS	\$ 2,110.00	\$	2,110.00
TOTAL SINGLE FAMILY RESIDENTIAL					\$ 326,320.00
GENERAL CONDITIONS					
General Conditions	1	LS	15%	\$	48,948.00
Escalation	1	LS	2.50%	\$	8,158.00
Contingency	1	LS	10%	\$	32,632.00
Contract Administration	1	LS	8%	\$	33,284.64
Planning/Design	1	LS	10%	\$	41,605.80
TOTAL GENERAL CONDITIONS					\$ 164,628.44
TOTAL NEW GENERAL OFFICER HOUSE					\$ 490,948.44
O&M Estimate for 50 years					\$ 7,016,065.81

SITE UTILITIES

	Total Units	Units	Cost Per Unit	Total
SITEWORK				
Trenching/Backfilling	1710	CY	\$ 24.00	\$ 41,040.00
Remove exist overhead	120	LF	\$ 89.00	\$ 10,680.00
Remove transformer	1	EA	\$ 2,500.00	\$ 2,500.00
DOMESTIC WATER SYSTEM				
4" Domestic water piping	1880	LF	\$ 43.30	\$ 81,404.00
SANITARY SEWER				
10" Sanitary sewer piping	1880	LF	\$ 15.50	\$ 29,140.00
New manhole	1	EA	\$ 3,850.00	\$ 3,850.00
ELECTRICAL				
New on-grade transformer	1	EA	\$ 25,000.00	\$ 25,000.00
New conductors	1	EA	\$ 22,800.00	\$ 22,800.00
TOTAL UTILITY WORK				\$ 216,414.00
GENERAL CONDITIONS				
General Conditions	1	LS	15%	\$ 32,462.10
Escalation	1	LS	2.50%	\$ 5,410.35
Contingency	1	LS	10%	\$ 21,641.40
Contract Administration	1	LS	8%	\$ 22,074.23
Planning/Design	1	LS	10%	\$ 27,592.79
TOTAL GENERAL CONDITIONS				\$ 109,180.86
TOTAL SITE UTILITIES				\$ 325,594.86

ARCHAEOLOGY

	Total Units	Units	Cost Per Unit		Total
Fieldwork	1	LS	\$	909,052.00	\$ 909,052.00
Processing/Analysis	1	LS	\$	170,094.00	\$ 170,094.00
Report Preparation	1	LS	\$	100,783.00	\$ 100,783.00
Consultation/Deliverables	1	LS	\$	17,779.00	\$ 17,779.00
Contingency	1	LS		10%	\$ 119,770.80
Contract Administration	1	LS		8%	\$ 95,816.64

TOTAL ARCHAEOLOGICAL MITIGATION \$ 1,413,295.44

HISTORIC AMERICAN BUILDING SURVEY

	Total Units	Units	Cost Per Unit		Total
Documentation	1	LS	\$	77,118.96	\$ 77,118.96

TOTAL HISTORIC AMERICAN BUILDING SURVEY \$ 77,118.96

SITE IMPROVEMENTS

	Total Units	Units	Cost Per Unit		Total
RESURFACE ROAD					
Bituminous Pavement Resurfacing	34,500.00	SF	\$	3.26	\$ 112,470.00

TOTAL SITE IMPROVEMENTS \$ 112,470.00

This page intentionally left blank.

Option 9 – Demolition with Land Converted to a Park

DEMOLITION WITH LAND CONVERTED TO A PARK SUMMARY

Bldg 1551	\$ 18,469.24
Bldg 1552	\$ 23,535.19
Bldg 1553	\$ 5,454.11
Bldg 1555	\$ 24,667.12
Bldg 1556	\$ 39,384.62
Bldg 1557	\$ 28,506.92
Bldg 1558	\$ 29,011.00
Bldg 1559	\$ 44,533.44
Bldg 1561	No Work
Bldg 1562	\$ 6,802.93
Bldg 1564	\$ 21,999.10
Bldg 1565	\$ 11,264.61
Utilities	No Work
Archaeology	\$ 834,008.72
HABS Documentation	\$ 77,118.96
Site Improvements	\$ 37,788.00
TOTAL	\$ 1,202,543.97
O&M ESTIMATE FOR 50 YEARS	\$ 9,284,202.87

DEMOLITION WITH LAND CONVERTED TO A PARK

	Total Units	Units	Cost Per Unit	Total
BUILDING 1551				
Total Gross Square Footage	800			
Demolition				
Building Demolition	16000	CF	\$ 0.37	\$ 5,920.00
Utilities Demolition	1	LS	\$ 1,100.00	\$ 1,100.00
Earthwork	100	CF	\$ 52.56	\$ 5,256.00
TOTAL DEMOLITION				\$ 12,276.00

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$ 1,841.40
Escalation	1	LS	2.50%	\$ 306.90
Contingency	1	LS	10%	\$ 1,227.60
Contract Administration	1	LS	8%	\$ 1,252.15
Planning/Design	1	LS	10%	\$ 1,565.19
TOTAL GENERAL CONDITIONS				\$ 6,193.24

TOTAL BUILDING 1551 DEMOLITION \$ 18,469.24

BUILDING 1552

Total Gross Square Footage 2,070

Demolition				
Building Demolition	23680	CF	\$ 0.37	\$ 8,761.60
Utilities Demolition	1	LS	\$ 1,100.00	\$ 1,100.00
Earthwork	110	CF	\$ 52.56	\$ 5,781.60
TOTAL DEMOLITION				\$ 15,643.20

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$ 2,346.48
Escalation	1	LS	2.50%	\$ 391.08
Contingency	1	LS	10%	\$ 1,564.32
Contract Administration	1	LS	8%	\$ 1,595.61
Planning/Design	1	LS	10%	\$ 1,994.51
TOTAL GENERAL CONDITIONS				\$ 7,891.99

TOTAL BUILDING 1552 DEMOLITION \$ 23,535.19

BUILDING 1553

Total Gross Square Footage 210

Demolition

Building Demolition	4320	CF	\$	0.37	\$	1,598.40
Utilities Demolition	1	LS	\$	450.00	\$	450.00
Earthwork	30	CF	\$	52.56	\$	1,576.80

TOTAL DEMOLITION	\$	3,625.20
-------------------------	-----------	-----------------

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$	543.78
Escalation	1	LS	2.50%	\$	90.63
Contingency	1	LS	10%	\$	362.52
Contract Administration	1	LS	8%	\$	369.77
Planning/Design	1	LS	10%	\$	462.21

TOTAL GENERAL CONDITIONS	\$	1,828.91
---------------------------------	-----------	-----------------

TOTAL BUILDING 1553 DEMOLITION	\$	5,454.11
---------------------------------------	-----------	-----------------

BUILDING 1555

Total Gross Square Footage 960

Demolition

Building Demolition	22020	CF	\$	0.37	\$	8,147.40
Utilities Demolition	1	LS	\$	1,100.00	\$	1,100.00
Earthwork	136	CF	\$	52.56	\$	7,148.16

TOTAL DEMOLITION	\$	16,395.56
-------------------------	-----------	------------------

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$	2,459.33
Escalation	1	LS	2.50%	\$	409.89
Contingency	1	LS	10%	\$	1,639.56
Contract Administration	1	LS	8%	\$	1,672.35
Planning/Design	1	LS	10%	\$	2,090.43

TOTAL GENERAL CONDITIONS	\$	8,271.56
---------------------------------	-----------	-----------------

TOTAL BUILDING 1555 DEMOLITION	\$	24,667.12
---------------------------------------	-----------	------------------

BUILDING 1556

Total Gross Square Footage 2,483

Demolition

Building Demolition	36100	CF	\$	0.37	\$	13,357.00
Utilities Demolition	1	LS	\$	1,100.00	\$	1,100.00
Earthwork	223	CF	\$	52.56	\$	11,720.88

TOTAL DEMOLITION	\$	26,177.88
-------------------------	-----------	------------------

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$	3,926.68
Escalation	1	LS	2.50%	\$	654.45
Contingency	1	LS	10%	\$	2,617.79
Contract Administration	1	LS	8%	\$	2,670.14
Planning/Design	1	LS	10%	\$	3,337.68

TOTAL GENERAL CONDITIONS	\$	13,206.74
---------------------------------	-----------	------------------

TOTAL BUILDING 1556 DEMOLITION	\$	39,384.62
---------------------------------------	-----------	------------------

BUILDING 1557

Total Gross Square Footage 1,545

Demolition

Building Demolition	26645	CF	\$	0.37	\$	9,858.65
Utilities Demolition	1	LS	\$	1,100.00	\$	1,100.00
Earthwork	152	CF	\$	52.56	\$	7,989.12

TOTAL DEMOLITION	\$	18,947.77
-------------------------	-----------	------------------

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$	2,842.17
Escalation	1	LS	2.50%	\$	473.69
Contingency	1	LS	10%	\$	1,894.78
Contract Administration	1	LS	8%	\$	1,932.67
Planning/Design	1	LS	10%	\$	2,415.84

TOTAL GENERAL CONDITIONS	\$	9,559.15
---------------------------------	-----------	-----------------

TOTAL BUILDING 1557 DEMOLITION	\$	28,506.92
---------------------------------------	-----------	------------------

BUILDING 1558

Total Gross Square Footage 1,410

Demolition

Building Demolition	26130	CF	\$	0.37	\$	9,668.10
Utilities Demolition	1	LS	\$	1,100.00	\$	1,100.00
Earthwork	162	CF	\$	52.56	\$	8,514.72

TOTAL DEMOLITION \$	19,282.82
----------------------------	------------------

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$	2,892.42
Escalation	1	LS	2.50%	\$	482.07
Contingency	1	LS	10%	\$	1,928.28
Contract Administration	1	LS	8%	\$	1,966.85
Planning/Design	1	LS	10%	\$	2,458.56

TOTAL GENERAL CONDITIONS \$	9,728.18
------------------------------------	-----------------

TOTAL BUILDING 1558 DEMOLITION \$	29,011.00
--	------------------

BUILDING 1559

Total Gross Square Footage 3,041

Demolition

Building Demolition	36400	CF	\$	0.37	\$	13,468.00
Utilities Demolition	1	LS	\$	1,100.00	\$	1,100.00
Earthwork	286	CF	\$	52.56	\$	15,032.16

TOTAL DEMOLITION \$	29,600.16
----------------------------	------------------

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$	4,440.02
Escalation	1	LS	2.50%	\$	740.00
Contingency	1	LS	10%	\$	2,960.02
Contract Administration	1	LS	8%	\$	3,019.22
Planning/Design	1	LS	10%	\$	3,774.02

TOTAL GENERAL CONDITIONS \$	14,933.28
------------------------------------	------------------

TOTAL BUILDING 1559 DEMOLITION \$	44,533.44
--	------------------

BUILDING 1562

Total Gross Square Footage 432

Demolition

Building Demolition	9300	CF	\$	0.37	\$	3,441.00
Utilities Demolition	1	LS	\$	450.00	\$	450.00
Earthwork	12	CF	\$	52.56	\$	630.72

TOTAL DEMOLITION	\$	4,521.72
-------------------------	-----------	-----------------

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$	678.26
Escalation	1	LS	2.50%	\$	113.04
Contingency	1	LS	10%	\$	452.17
Contract Administration	1	LS	8%	\$	461.22
Planning/Design	1	LS	10%	\$	576.52

TOTAL GENERAL CONDITIONS	\$	2,281.21
---------------------------------	-----------	-----------------

TOTAL BUILDING 1562 DEMOLITION	\$	6,802.93
---------------------------------------	-----------	-----------------

Building 1564

Total Gross Square Footage 720

Demolition

Building Demolition	19500	CF	\$	0.37	\$	7,215.00
Utilities Demolition	1	LS	\$	1,100.00	\$	1,100.00
Earthwork	120	CF	\$	52.56	\$	6,307.20

TOTAL DEMOLITION	\$	14,622.20
-------------------------	-----------	------------------

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$	2,193.33
Escalation	1	LS	2.50%	\$	365.56
Contingency	1	LS	10%	\$	1,462.22
Contract Administration	1	LS	8%	\$	1,491.46
Planning/Design	1	LS	10%	\$	1,864.33

TOTAL GENERAL CONDITIONS	\$	7,376.90
---------------------------------	-----------	-----------------

TOTAL BUILDING 1564 DEMOLITION	\$	21,999.10
---------------------------------------	-----------	------------------

BUILDING 1565

Total Building Square Footage 317

	Total Units	Units	Cost Per Unit	Total
Demolition				
Building Demolition	600	CF	\$ 0.37	\$ 222.00
Utilities Demolition	1	LS	\$ 950.00	\$ 950.00
Earthwork	125	CF	\$ 52.56	\$ 6,570.00

TOTAL DEMOLITION \$ 7,742.00

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$ 1,161.30
Escalation	1	LS	2.50%	\$ 193.55
Contingency	1	LS	10%	\$ 774.20
Contract Administration	1	LS	8%	\$ 619.36
Planning/Design	1	LS	10%	\$ 774.20

TOTAL GENERAL CONDITIONS \$ 3,522.61

DEMOLITION TOTAL \$ 11,264.61

SITE IMPROVEMENTS

	Total Units	Units	Cost Per Unit		Total
Landscaping					
Seeding	35,000	SF	\$	0.31	\$ 10,850.00
Site Furnishing					
Recycled plastic bench	8	EA	\$	600.00	\$ 4,800.00
Recycled plastic picnic table	7	EA	\$	1,050.00	\$ 7,350.00
Recycled accessible picnic table	1	EA	\$	1,200.00	\$ 1,200.00
Recycled plastic trash receptacle	8	EA	\$	500.00	\$ 4,000.00
TOTAL SITE IMPROVEMENTS					\$ 28,200.00

GENERAL CONDITIONS

General Conditions	1	LS	15%	\$	4,230.00
Escalation	1	LS	2.50%	\$	705.00
Contingency	1	LS	2%	\$	564.00
Contract Administration	1	LS	8%	\$	2,256.00
Planning/Design	1	LS	7%	\$	1,833.00
TOTAL GENERAL CONDITIONS					\$ 9,588.00

TOTAL SITE IMPROVEMENTS \$ 37,788.00

O&M Estimate for 50 years \$ 9,284,202.87

ARCHAEOLOGY

	Total Units	Units	Cost Per Unit		Total
Fieldwork	1	LS	\$	388,733.04	\$ 388,733.04
Monitoring	1	LS	\$	37,140.20	\$ 37,140.20
Lab and Report Preparation	1	LS	\$	276,154.30	\$ 276,154.30
Contingency	1	LS		10%	\$ 70,202.75
Contract Administration	1	LS		8%	\$ 61,778.42

TOTAL ARCHAEOLOGICAL MITIGATION \$ 834,008.72

HISTORIC AMERICAN BUILDING SURVEY

	Total Units	Units	Cost Per Unit		Total
Documentation	1	LS	\$	77,118.96	\$ 77,118.96

TOTAL HISTORIC AMERICAN BUILDING SURVEY \$ 77,118.96

This page intentionally left blank.

Appendix B

Long-Term O&M Costs

Long-Term O&M Costs

To maintain the facilities, the building user must provide ongoing maintenance funding. In this report, O&M costs have been calculated over the course of 50 years in order to correspond with the terms of the housing privatization project.

Method of Calculation

The annual O&M cost was developed using the following method:

1. Multiply the square footage of each building with an associated maintenance cost.
(Minimum annual maintenance cost per square foot x Square feet = Year 1 cost)
 - For options involving initial housing-unit renovation or new construction, the minimum annual maintenance cost used was \$1.25/sq ft.
 - For options where the housing units were maintained in their existing condition, the minimum annual maintenance cost was increased from \$1.25 to \$2.75/sq ft.
 - For all options, for ancillary buildings (garages and storage), the minimum annual maintenance cost used was \$1.25/sq ft.
2. Multiply the total from step 1 by an assumed 4 percent inflation per year over 50 years.
(Minimum annual maintenance cost per square foot x Square feet x 4% inflation = Year 2 cost)
The result is a minimum maintenance requirement per year.

Sample calculation: The following provides an example of these two steps when applied to Building 1556:

1. Minimum annual maintenance cost per square foot x Square feet = Year 1 cost \$1.25/sq ft x 2,483 sq ft = \$3,103.75
2. Minimum annual maintenance cost per square foot x Square feet x 4% inflation = Year 2 cost \$1.25/sq ft x 2,483 sq ft x 1.04 = \$3,227.90

Major Replacement Costs

In addition, the O&M estimates include replacement of major items at selected intervals. These items include:

- HVAC replacement at years 15, 30, and 45
- Kitchen and bathroom replacement at years 16 and 32
- Roof replacement at year 25
- Landscape furniture replacement at years 16 and 32 (applies only for Option 9—Demolition with land converted to a park)

Mothballing Costs

Mothballing O&M costs were developed for only 10 years, since long-term mothballing is not a compatible use with the adjacent family housing area. Mothballing maintenance costs were developed by estimating the amount of time it would take an Eglin employee, making \$20/hour, to perform the weekly, monthly, and quarterly tasks as noted on page 32 of the report in the section "Work required for mothballing."

The time estimates used were 2 hours for weekly inspections, 4 hours for monthly tasks, and 8 hours for quarterly inspections, for a total of 144 hours per year. The tasks involved in the three levels of inspections are cumulative: the 4 hours for monthly inspections include the 2 hours of tasks performed during a weekly inspection, and the 8 hours of quarterly inspections include the 4 hours of combined monthly and weekly tasks, as follows.

Quarterly inspections:	4 weeks per year	x	8 hours	=	32 hours
Monthly inspections:	8 weeks per year	x	4 hours	=	32 hours
Weekly inspections:	40 weeks per year	x	2 hours	=	80 hours
Totals:	52 weeks				144 hours

These calculations assume that in any given week, one of the three levels of inspections is performed. The following shows the equations and values used to determine mothballing costs:

Calculations to determine mothballing O&M costs per square foot

Hours per year x hourly employee rate / total Camp Pinchot square footage = cost/square foot (144 hrs x \$20/hr) / 14,758 = \$0.20/sq ft
Mothball cost/sq ft x Building 1556 sq ft = Year 1 Cost \$0.20/sq ft x 2,483 sq ft = \$496.60

Grounds Maintenance Costs

Grounds-maintenance costs were also calculated for each option. In some options, the grounds are under the jurisdiction of the housing developer; in others, the grounds are maintained by Eglin. This report assumes the following conditions when calculating these costs:

- An outside contractor would provide the grounds maintenance in all options, especially since Eglin would no longer have a maintenance facility on site.
- For all options where buildings are occupied, lawn mowing would occur approximately 40 weeks/year at a total cost of \$100,000 for the first year, with subsequent yearly increases for inflation.
- For the mothballing option, grounds would be mowed once a month at a cost of \$30,000, with subsequent yearly increases for inflation.
- For Option 9 (Demolition with the land converted to a park), grounds would be mowed every two weeks, for a cost of \$60,000, with subsequent yearly increases for inflation.
- Eglin would have a current contract for trash pickup that could be extended to include each option; therefore trash pickup is not estimated for any scenario.

Estimated O&M Costs per Option

Option 1 - Base Recreational Facility

Building #	Annual Maintenance	Renovation Projects	Total
1551	\$152,667.08	\$5,639.27	\$158,306.35
1552	\$395,026.08	\$14,591.61	\$409,617.69
1553	\$40,075.11	\$87,709.45	\$127,784.56
1555	\$183,200.50	\$166,253.13	\$349,453.63
1556	\$473,840.46	\$334,375.50	\$808,215.96
1557	\$294,838.31	\$245,219.73	\$540,058.04
1558	\$269,075.73	\$186,939.01	\$456,014.75
1559	\$580,325.75	\$355,830.38	\$936,156.13
1561	\$146,942.07	\$5,427.80	\$152,369.86
1562	\$82,440.23	\$3,045.21	\$85,485.43
1564	\$137,400.38	\$160,408.78	\$297,809.15
1565	\$60,494.33	\$10,825.72	\$71,320.05
Grounds	\$15,266,708.37	\$0.00	\$15,266,708.37
TOTALS	\$18,083,034.39	\$1,576,265.58	\$19,659,299.97

Option 2 - Housing Developer Use as Offices

Building #	Annual Maintenance	Renovation Projects	Total
1551	\$152,667.08	\$5,639.27	\$158,306.35
1552	\$395,026.08	\$14,591.61	\$409,617.69
1553	\$40,075.11	\$90,786.70	\$130,861.81
1555	\$183,200.50	\$3,383.56	\$186,584.06
1556	\$473,840.46	\$301,978.84	\$775,819.30
1557	\$294,838.31	\$255,888.13	\$550,726.44
1558	\$269,075.73	\$247,445.78	\$516,521.51
1559	\$580,325.75	\$349,441.94	\$929,767.69
1561	\$146,942.07	\$5,427.80	\$152,369.86
1562	\$82,440.23	\$3,045.21	\$85,485.43
1564	\$137,400.38	\$151,205.94	\$288,606.32
1565 - demo	\$0.00	\$0.00	\$0.00
Grounds	\$15,266,708.37	\$0.00	\$15,266,708.37
TOTALS	\$18,022,540.06	\$1,428,834.77	\$19,451,374.83

Options 3 - Interpretive Center Partnership

Building #	Annual Maintenance	Renovation Projects	Total
1551	\$152,667.08	\$50,028.77	\$202,695.86
1552	\$395,026.08	\$14,591.61	\$409,617.69
1553	\$40,075.11	\$90,786.70	\$130,861.81
1555	\$183,200.50	\$56,650.96	\$239,851.47
1556	\$473,840.46	\$301,978.84	\$775,819.30
1557	\$294,838.31	\$255,888.13	\$550,726.44
1558	\$269,075.73	\$247,445.78	\$516,521.51
1559	\$580,325.75	\$349,441.94	\$929,767.69
1561	\$146,942.07	\$5,427.80	\$152,369.86
1562	\$82,440.23	\$27,015.54	\$109,455.76
1564	\$137,400.38	\$151,205.94	\$288,606.32
1565 - demo	\$0.00	\$0.00	\$0.00
Grounds	\$15,266,708.37	\$0.00	\$15,266,708.37
TOTALS	\$18,022,540.06	\$1,550,462.01	\$19,573,002.07

Option 4 - Renovation into GOQs, SOQs, and JNCOQs**Option 5 - Renovation into JNCOQs**

Building #	Annual Maintenance	Renovation Projects	Total
1551	\$152,667.08	\$5,639.27	\$158,306.35
1552	\$395,026.08	\$14,591.61	\$409,617.69
1553	\$40,075.11	\$87,709.45	\$127,784.56
1555	\$183,200.50	\$3,383.56	\$186,584.06
1556	\$473,840.46	\$334,375.50	\$808,215.96
1557	\$294,838.31	\$245,219.73	\$540,058.04
1558	\$269,075.73	\$186,939.01	\$456,014.75
1559	\$580,325.75	\$355,830.38	\$936,156.13
1561	\$146,942.07	\$5,427.80	\$152,369.86
1562	\$82,440.23	\$3,045.21	\$85,485.43
1564	\$137,400.38	\$160,408.78	\$297,809.15
1565 - demo	\$0.00	\$0.00	\$0.00
Grounds	\$15,266,708.37	\$0.00	\$15,266,708.37
TOTALS	\$18,022,540.06	\$1,402,570.30	\$19,425,110.36

Option 6 - Maintain Existing Quarters

Building #	Annual Maintenance	Renovation Projects	Total
1551	\$152,667.08	\$5,639.27	\$158,306.35
1552	\$395,026.08	\$14,591.61	\$409,617.69
1553	\$40,075.11	\$87,709.45	\$127,784.56
1555	\$183,200.50	\$3,383.56	\$186,584.06
1556	\$1,042,449.01	\$334,375.50	\$1,376,824.51
1557	\$648,644.27	\$245,219.73	\$893,864.01
1558	\$591,966.62	\$186,939.01	\$778,905.63
1559	\$1,276,716.65	\$355,830.38	\$1,632,547.04
1561	\$146,942.07	\$5,427.80	\$152,369.86
1562	\$82,440.23	\$3,045.21	\$85,485.43
1564	\$302,280.83	\$160,408.78	\$462,689.61
1565	\$60,494.33	\$10,825.72	\$71,320.05
Grounds	\$15,266,708.37	\$0.00	\$15,266,708.37
TOTALS	\$20,189,611.15	\$1,413,396.02	\$21,603,007.16

Option 7 - Mothballing

Building #	Annual Maintenance	Renovation Projects	Total
1551	\$1,920.98	\$0.00	\$1,920.98
1552	\$4,970.53	\$0.00	\$4,970.53
1553	\$504.26	\$0.00	\$504.26
1555	\$2,305.17	\$0.00	\$2,305.17
1556	\$5,962.23	\$0.00	\$5,962.23
1557	\$3,709.89	\$0.00	\$3,709.89
1558	\$3,385.72	\$0.00	\$3,385.72
1559	\$7,302.11	\$0.00	\$7,302.11
1561	\$1,848.94	\$0.00	\$1,848.94
1562	\$1,037.33	\$0.00	\$1,037.33
1564	\$1,728.88	\$0.00	\$1,728.88
1565	\$761.19	\$0.00	\$761.19
Grounds	\$360,183.21	\$0.00	\$360,183.21
TOTALS	\$395,620.44	\$0.00	\$395,620.44

Option 8 - Demolition and New Construction

Building #	Annual Maintenance	Renovation Projects	Total
1551 - demo	\$0.00	\$0.00	\$0.00
1552 - demo	\$0.00	\$0.00	\$0.00
1553 - demo	\$0.00	\$0.00	\$0.00
1555 - demo	\$0.00	\$0.00	\$0.00
1556 - demo	\$0.00	\$0.00	\$0.00
1557 - demo	\$0.00	\$0.00	\$0.00
1558 - demo	\$0.00	\$0.00	\$0.00
1559 - demo	\$0.00	\$0.00	\$0.00
1561	\$146,942.07	\$5,427.80	\$152,369.86
1562 - demo	\$0.00	\$0.00	\$0.00
1564 - demo	\$0.00	\$0.00	\$0.00
1565 - demo	\$0.00	\$0.00	\$0.00
GOQ	\$629,751.72	\$345,530.21	\$975,281.93
2 SOQ	\$961,802.63	\$659,452.98	\$1,621,255.61
Grounds	\$15,266,708.37	\$0.00	\$15,266,708.37
TOTALS	\$17,005,204.78	\$1,010,410.99	\$18,015,615.77

Option 9 - Demolition With Land Converted to a Park

Building #	Annual Maintenance	Renovation Projects	Total
1551	\$0.00	\$0.00	\$0.00
1552	\$0.00	\$0.00	\$0.00
1553	\$0.00	\$0.00	\$0.00
1555	\$0.00	\$0.00	\$0.00
1556	\$0.00	\$0.00	\$0.00
1557	\$0.00	\$0.00	\$0.00
1558	\$0.00	\$0.00	\$0.00
1559	\$0.00	\$0.00	\$0.00
1561	\$0.00	\$0.00	\$0.00
1562	\$0.00	\$0.00	\$0.00
1564	\$0.00	\$0.00	\$0.00
1565	\$0.00	\$0.00	\$0.00
Grounds	\$9,160,025.02	\$124,177.85	\$9,284,202.87
TOTALS	\$9,160,025.02	\$124,177.85	\$9,284,202.87

This page intentionally left blank.

Appendix C

Public Law 437

- Special projects, etc. Special projects, vessels, and aids to navigation: For an additional amount for special projects, aids to navigation, Lighthouse Service, Coast Guard, including the same objects specified under the heading "Special projects, vessels, and aids to navigation", in the Department of Commerce Appropriation Act, 1940, \$550,000, and in addition thereto, not to exceed \$160,000 may be transferred to said appropriation for special projects, aids to navigation, from the appropriation "Fuel and Water, Coast Guard, 1940", to continue available until expended.
- 53 Stat. 914.
Transfer of funds.
- Claims for damages, operation of vessels.
Ante, p. 91.
- 49 Stat. 1514.
14 U. S. C., Supp. V, § 71.
- Claims for damages, operation of vessels: To pay claims for damages adjusted and determined by the Secretary of the Treasury under the provisions of the Act entitled "An Act to provide for the adjustment and settlement of certain claims for damages resulting from the operation of vessels of the Coast Guard and the Public Health Service, in sums not exceeding \$3,000 in any one case", approved June 15, 1936, as fully set forth in House Document Numbered 757, Seventy-sixth Congress, \$406.85.

SECRET SERVICE DIVISION

- Suppressing counterfeiting, etc. Suppressing counterfeiting and other crimes: For an additional amount, fiscal year 1941, for suppressing counterfeiting and other crimes, including the objects and subject to the limitations specified under this head in the Treasury Department Appropriation Act, 1941, \$27,000.
- Ante*, p. 67.
- White House Police.
Ante, pp. 68, 156.
- White House Police: For an additional amount for salaries at the rates of pay provided by law, fiscal year 1941, \$49,000.
- Ante*, p. 68.
- For an additional amount for uniforming and equipping the White House Police, including the same objects specified under this head in the Treasury Department Appropriation Act, 1941, \$3,500.

BUREAU OF THE MINT

- Transportation of bullion and coin. Transportation of bullion and coin: For an additional amount for transportation of bullion and coin, between mints, assay offices, and bullion depositories, including compensation of temporary employees, fiscal year 1940, \$1,608,000, to remain available until June 30, 1941.
- Ante*, p. 68.
- Medal for Howard Hughes. Medal for Howard Hughes: For carrying out the provisions of the Act entitled "An Act to provide for the presentation of a medal to Howard Hughes in recognition of his achievement in advancing the science of aviation", approved August 7, 1939 (Private Act Numbered 214), fiscal year 1941, \$250.
- 53 Stat. 1525.
- Medal for Rev. Francis X. Quinn. Medal for Reverend Francis X. Quinn: For carrying out the provisions of the Act entitled "An Act to provide for the presentation of a medal to Reverend Francis X. Quinn in recognition of his valor in saving the lives of two of his fellow citizens", approved August 10, 1939 (Private Act Numbered 235), fiscal year 1941, \$250.
- 53 Stat. 1533.

WAR DEPARTMENT

MILITARY ACTIVITIES

OFFICE OF THE SECRETARY OF WAR

- Claims for damages to and loss of private property. Claims for damages to and loss of private property: To pay claims for damages adjusted and determined by the Secretary of War under the provisions of an Act entitled "An Act making appropriations for the support of the Army for the fiscal year ending June 30, 1913, and for other purposes", approved August 24, 1912, as fully set forth in House Document Numbered 759, Seventy-sixth Congress, \$1,449.92.
- 53 Stat. 599.
Ante, p. 92.
- 37 Stat. 586.
5 U. S. C. § 208.

GENERAL STAFF CORPS

Miscellaneous expenses, military intelligence activities: For an additional amount for miscellaneous expenses, military intelligence activities, fiscal year 1941, including the same objects specified under this head in the Military Appropriation Act, 1941, to be immediately available, \$135,000.

Miscellaneous expenses, military intelligence activities.

Ante, p. 353.

QUARTERMASTER CORPS

Acquisition of land for radiobeacons, Army: Not to exceed \$1,500 of the unexpended balance of the appropriation for the acquisition of land for sites for radiobeacons contained in the Military Appropriation Act, 1939, is hereby made available until expended for the acquisition of land for sites for radiobeacons in the vicinity of Amarillo, Texas, and Albuquerque, New Mexico, as authorized by the Act of August 12, 1935.

Acquisition of land for radiobeacons.

52 Stat. 552.

49 Stat. 610.
10 U. S. C., Supp. V, §§ 1343a, 1343d.

Choctawhatchee National Forest, Fla.
Acquisition of land.

Acquisition of land, Choctawhatchee National Forest, Florida: For the acquisition of title to all privately owned land within the established boundaries of the Choctawhatchee National Forest, Florida, including expenditures necessary to terminate and liquidate existing forest-products contracts, and reimbursement to special-use permittees for the present value of their improvements, \$76,750, fiscal year 1940, to remain available until expended: *Provided*, That all Government-owned land in the Choctawhatchee National Forest, Florida, is hereby transferred from the control and jurisdiction of the Forest Service, Department of Agriculture, to the control and jurisdiction of the War Department for use for military purposes: *Provided further*, That in the event the area hereby transferred, together with any land hereafter acquired by the War Department within or adjacent to said national forest, shall cease to be needed for military purposes it may, by proclamation or order of the President, be restored to a national-forest status: *Provided further*, That the Secretary of War is hereby authorized, under such terms and conditions as he may prescribe, to discontinue all forest activities within the area hereby transferred, and which may hereafter be acquired, to terminate all existing special-use permits, and to renew such thereof as to which there may be no military objection.

Proviso.
Transfer of Government-owned land.

Restoration to national-forest status.

Discontinuance, etc., of forest activities.

Military posts: Of the funds appropriated under the title "Military Posts" in the Supplemental Military Appropriation Act, 1940, not to exceed \$13,000 may be applied to the satisfaction of claims in connection with the extinguishment of private licenses on military lands in the Panama Canal Zone: *Provided*, That the respective amounts to be awarded to claimants shall be restricted to the reasonable value of improvements placed by them on such lands, as determined by a board of officers appointed by the commanding general, Panama Canal Department, and approved by the Secretary of War.

Military lands, Canal Zone.
53 Stat. 994.

Proviso.
Awards to claimants.

Not to exceed \$25,000 of any funds available to the War Department during the fiscal year 1941 for the construction of buildings, utilities, and appurtenances at military posts may be used for the payment to the owner of the transmission lines on Moffett Field Military Reservation, California, of excess cost of removing said lines to a new location, as determined by and in accordance with conditions approved by the Secretary of War.

Moffett Field, Calif.
Payment to owner of transmission lines.

All moneys available on July 1, 1940, under the appropriation "Construction of Buildings, Utilities, and Appurtenances at Military Posts" may be used in connection with the purposes of such appropriation for the employment of personnel at the seat of Government or elsewhere without regard to civil-service requirements and restrictions of law relating thereto.

Personal services; use of designated funds.

Army Medical Library and Museum.

Ante, p. 363.

41 U. S. C. § 5.

Transfer of funds, limitation.
Ante, p. 350.

Army Medical Library and Museum: The design for the Army Medical Library and Museum, the appropriation on account of which is contained in the Military Appropriation Act, 1941, shall be prepared under the direction and supervision of the Secretary of War and Surgeon General of the Army, who shall select and employ the architect, by contract or otherwise, without reference to section 3709 of the Revised Statutes or the civil service or classification laws; and such appropriation shall be available for payment for such design. Not to exceed 5 per centum of any of the appropriations for the Military Establishment for the fiscal year 1941 may be transferred with the approval of the Director of the Bureau of the Budget to any other of such appropriations, but no appropriation shall be increased more than 5 per centum thereby.

CIVIL FUNCTIONS

CORPS OF ENGINEERS

Claims for damages, rivers and harbors.

41 Stat. 1015.

Claims for damages, rivers and harbors: To pay claims for damages under river and harbor work adjusted and determined by the War Department under the provision of section 9 of the River and Harbor Act, approved June 5, 1920 (33 U. S. C. 564), as set forth in Senate Document Numbered 227 and House Document Numbered 760, Seventy-sixth Congress, \$14,767.25.

PANAMA CANAL

Trans-Isthmian Highway.

53 Stat. 1870.

Construction of a Trans-Isthmian Highway: For every expenditure requisite for, and incident to, the construction of that portion of a Trans-Isthmian Highway between the Canal Zone boundary near Cativa and a junction with the Fort Randolph Road near France Field in accordance with article II of the convention between the United States and the Republic of Panama with regard to the construction of a Trans-Isthmian Highway between the cities of Panama and Colón, signed March 2, 1936, and to the ratification of which the United States Senate gave its advice and consent July 25, 1939, fiscal year 1940, \$325,000, to remain available until expended and to be expended under the direction of the Governor of the Panama Canal.

TITLE II—JUDGMENTS AND AUTHORIZED CLAIMS

PROPERTY DAMAGE CLAIMS

Payment.

42 Stat. 1066.
31 U. S. C. §§ 215-217.

SEC. 201. (a) For the payment of claims for damages to or losses of privately owned property adjusted and determined by the following respective departments and independent offices, under the provisions of the Act entitled "An Act to provide a method for the settlement of claims arising against the Government of the United States in the sums not exceeding \$1,000 in any one case", approved December 28, 1922 (31 U. S. C. 215), as fully set forth in the House Document Numbered 755 of the Seventy-sixth Congress, as follows: Civil Aeronautics Authority, \$992.48; Federal Works Agency: Public Works Administration, \$10.01; Public Buildings Administration, \$51.15; Works Progress Administration, \$494.66; Veterans' Administration, \$37.50; Department of Agriculture, \$7,090.09; Department of the Interior, \$1,181.47;

This page left intentionally blank.

Appendix D

Standards for Housing Sizes

Overview

This appendix contains descriptions of the standard sizes for the housing grades of GOQ, SOQ, and JNCOQ. These grades are the ones that would most likely occupy the existing housing units, based on gross square footage and program. Existing square foot numbers were taken from the 96 CEG floor plans for each house and the housing assessment reports. According to the Air Force's August 2004 Family Housing Guide, the size of the "enclosed" porch can be counted as occupied space if it is an extension of the living space.¹ For this report, the porch is counted as a Family Room if it is conditioned and open to the rest of the house; it is excluded if the porch is separate and non-conditioned.

For Buildings 1556 and 1559, existing gross square footage figures were taken from Eglin's real estate inventory. For Buildings 1557 and 1558, there is a significant discrepancy between gross square footage figures from the real estate inventory in comparison to 96 CEG floor plans and the Housing Community Profile reports. As a result, this report uses figures in the Housing Community Profile reports for Buildings 1557 and 1558.

General Officer Quarters (GOQ)

The gross square feet for a renovated house ranges from 2,380 s.f. to 3,330 s.f. For a new house, the range is 2,600 s.f. to 4,060 s.f. Size increases are allowed for a general officer who also has a special command position: 2,620 s.f. to 3,660 s.f. renovated and 2,860 s.f. to 4,060 s.f. new construction.

Table D-1 and Table D-2 list the programs for a renovated standard GOQ and a renovated senior NCO (E9) in comparison to Building 1559.

¹ Secretary of the Air Force, *US Air Force Family Housing Guide*, 109.

Table D-1 Building 1559 program/size summary for renovated standard GOQ

Program	Standard (in square feet)			Existing (square feet)	Notes
	Min	Target	Max		
Master Bedroom	170	180	210	251	Exceeds Maximum
Master Bath	50	65	100	71	Acceptable
Bedroom 2	150	160	180	175	Acceptable
Bedroom 3	130	140	160	148	Acceptable
Bedroom 4	120	130	140	0	Not present
Bathroom 2	50	60	85	45	Below Minimum
Hall ½ Bath	24	30	35	28	Acceptable
Bedroom/Linen Closets	50	60	140	82	Acceptable
Kitchen w/Dining Area	260	280	340	224	Below Minimum
Dining Room	200	210	290	169	Below Minimum
Living Room	240	250	320	397	Exceeds Maximum
Family Room	180	200	290	632	Exceeds Maximum
Entry and Hall Closet	50	60	100	135	Exceeds Maximum
Laundry	60	70	100	122	Exceeds Maximum
Interior Storage	100	100	100	119	Exceeds Maximum
Exterior Storage	100	100	100	60	Below Minimum
Other Net/Gross	446	505	640	383	Below Minimum
TOTAL	2,380	2,600	3,330	3,041	Acceptable gross; missing fourth bedroom

Table D-2 Building 1559 program/size summary for renovated senior NCO (E9)

Program	Standard (in square feet)			Existing (square feet)	Notes
	Min	Target	Max		
Master Bedroom	160	170	200	251	Exceeds Maximum
Master Bath	40	45	70	71	Exceeds Maximum
Bedroom 2	140	150	180	175	Acceptable
Bedroom 3	100	110	140	148	Exceeds Maximum
Bedroom 4	90	100	110	0	Not Present
Bathroom 2	40	45	70	45	Acceptable
Hall ½ Bath	24	30	35	28	Acceptable
Bedroom/Linen Closets	45	50	60	82	Exceeds Maximum
Kitchen w/Dining Area	200	220	270	224	Acceptable
Dining Room	150	160	180	169	Acceptable
Living Room	190	200	230	397	Exceeds Maximum
Family Room	140	150	170	632	Exceeds Maximum
Entry and Hall Closet	40	45	60	135	Exceeds Maximum
Laundry	45	55	75	122	Exceeds Maximum
Interior Storage	45	55	75	119	Exceeds Maximum
Exterior Storage	45	55	75	60	Acceptable
Other Net/Gross	356	370	400	4383	Exceeds Maximum
TOTAL	1,850	2,010	2,410	3,041	Gross exceeds maximum; missing fourth bedroom

Senior Officer Quarters (SOQ)

The gross square feet for a renovated house ranges from 1,930 s.f. to 2,520 s.f. For a new house, the range is 2,110 s.f. to 2,920 s.f. Size increases are allowed for a senior officer who is also the installation commander: 2,120 s.f. to 2,770 s.f. renovated and 2,320 s.f. to 2,920 s.f. new construction. Table D-3 and Table D-4 list the programs for a renovated standard SOQ in comparison to Building 1556 and Building 1557.

Table D-3 Building 1556 program/size summary for renovated standard SOQ

Program	Standard (in square feet)			Existing (square feet)	Notes
	Min	Target	Max		
Master Bedroom	160	170	200	369	Exceeds Maximum
Master Bath	40	45	80	74	Acceptable
Bedroom 2	140	150	180	206	Exceeds Maximum
Bedroom 3	100	110	140	0	Not Present
Bedroom 4	100	110	120	0	Not Present
Bathroom 2	40	45	70	46	Acceptable
Hall ½ Bath	24	30	35	23	Below Minimum
Bedroom/Linen Closets	45	50	60	38	Below Minimum
Kitchen w/Dining Area	200	220	280	198	Below Minimum
Dining Room	160	170	190	226	Exceeds Maximum
Living Room	200	210	240	367	Exceeds Maximum
Family Room	140	150	180	260	Exceeds Maximum
Entry and Hall Closet	45	50	60	87	Exceeds Maximum
Laundry	45	55	70	87	Exceeds Maximum
Interior Storage	45	55	70	56	Acceptable
Exterior Storage	45	60	80	31	Below Minimum
Other Net/Gross	401	430	465	415	Below Minimum
TOTAL	1,930	2,110	2,520	2,483	Acceptable gross; missing two bedrooms

Table D-4 Building 1557 program/size summary for renovated standard SOQ

Program	Standard (in square feet)			Existing (square feet)	Notes
	Min	Target	Max		
Master Bedroom	160	170	200	150	Below Minimum
Master Bath	40	45	80	40	Acceptable
Bedroom 2	140	150	180	134	Below Minimum
Bedroom 3	100	110	140	120	Acceptable
Bedroom 4	100	110	120	0	Not Present
Bathroom 2	40	45	70	0	Not Present
Hall ½ Bath	24	30	35	27	Acceptable
Bedroom/Linen Closets	45	50	60	43	Below Minimum
Kitchen w/Dining Area	200	220	280	104	Below Minimum
Dining Room	160	170	190	125	Below Minimum
Living Room	200	210	240	188	Below Minimum
Family Room	140	150	180	227	Below Minimum
Entry and Hall Closet	45	50	60	59	Acceptable
Laundry	45	55	70	75	Exceeds Maximum
Interior Storage	45	55	70	28	Below Minimum
Exterior Storage	45	60	80	0	Not Present
Other Net/Gross	401	430	465	225	Below Minimum
TOTAL	1,930	2,110	2,520	1,545	Requires additions to meet gross and program standard

Junior/Non-Commissioned Officer Quarters (JNCOQ)

Applicable JNCOQ standards include a three-bedroom unit and a two-bedroom unit. Gross square feet for a renovated three-bedroom unit ranges from 1,370 s.f. to 1,630 s.f. and from 1,490 s.f. to 1,760 s.f. for a new unit. For a two-bedroom unit, size ranges are 1,080 s.f. to 1,340 s.f. for a renovated unit and 1,180 s.f. to 1,500 s.f. for a new unit. Table D-5 lists the program for a renovated JNCOQ in comparison to Building 1557 (a three-bedroom unit), and Table D-6 lists the same for Building 1558 (a two-bedroom unit):

Table D-5 Building 1557 program/size summary for renovated three-bedroom JNCOQ

Program	Standard (in square feet)			Existing (square feet)	Notes
	Min	Target	Max		
Master Bedroom	150	155	160	150	Acceptable
Master Bath	40	45	55	40	Acceptable
Bedroom 2	130	135	145	134	Acceptable
Bedroom 3	90	100	110	120	Exceeds Minimum
Bathroom 2	40	45	50	0	Not Present
Hall ½ Bath	24	30	35	27	Acceptable
Bedroom/Linen Closets	30	35	40	43	Exceeds Maximum
Kitchen w/Dining Area	110	130	150	104	Below Minimum
Dining Room	100	110	120	125	Exceeds Minimum
Living Room	150	160	170	188	Exceeds Minimum
Family Room	100	110	120	227	Assumes porch is conditioned; Exceeds Maximum
Entry and Hall Closet	35	40	45	59	Exceeds Minimum
Laundry	35	40	45	75	Exceeds Maximum
Interior Storage	35	40	45	28	Below Minimum
Exterior Storage	35	40	45	0	Below Minimum
Other Net/Gross	266	275	295	225	Below Minimum
TOTAL	1,370	1,490	1,630	1,545	Acceptable gross; missing second bath and storage

Table D-6 Building 1558 program/size summary for renovated two-bedroom JNCOQ

Program	Standard (in square feet)			Existing (square feet)	Notes
	Min	Target	Max		
Master Bedroom	150	155	160	185	Exceeds Maximum
Bedroom 2	130	135	145	103	Below Minimum
Bathroom 1	40	45	55	59	Exceeds Maximum
Hall ½ Bath	24	30	35	0	Not Present
Bedroom/Linen Closets	24	30	35	30	Acceptable
Kitchen w/Dining Area	110	130	150	123	Acceptable
Dining Room	100	110	120	135	Exceeds Maximum
Living Room	150	160	170	345	Exceeds Maximum
Entry and Hall Closet	35	40	45	25	Below Minimum
Laundry	30	35	40	70	Exceeds Maximum
Interior Storage	24	30	35	0	Below Minimum
Exterior Storage	24	30	35	0	Below Minimum
Enclosed Porch	0	0	0	184	Not Conditioned
Other Net/Gross	239	250	315	151	Below Minimum
TOTAL	1,080	1,180	1,340	1,410	Exceeds gross with porch; missing ½ bath & int. storage

Appendix E

Secretary of the Interior's Standards for Rehabilitation

Introduction to the Standards

The Secretary of the Interior is responsible for establishing standards for all programs under Departmental authority and for advising Federal agencies on the preservation of historic properties listed in or eligible for listing in the National Register of Historic Places.

The Standards for Rehabilitation (codified in 36 CFR 67 for use in the Federal Historic Preservation Tax Incentives program) address the most prevalent treatment. "Rehabilitation" is defined as "the process of returning a property to a state of utility, through repair or alteration, which makes possible an efficient contemporary use while preserving those portions and features of the property which are significant to its historic, architectural, and cultural values."

Initially developed by the Secretary of the Interior to determine the appropriateness of proposed project work on registered properties within the Historic Preservation Fund grant-in-aid program, the Standards for Rehabilitation have been widely used over the years—particularly to determine if a rehabilitation qualifies as a Certified Rehabilitation for Federal tax purposes. In addition, the Standards have guided Federal agencies in carrying out their historic preservation responsibilities for properties in Federal ownership or control; and State and local officials in reviewing both Federal and nonfederal rehabilitation proposals. They have also been adopted by historic district and planning commissions across the country.

The intent of the Standards is to assist the long-term preservation of a property's significance through the preservation of historic materials and features. The Standards pertain to historic buildings of all materials, construction types, sizes, and occupancy and encompass the exterior and interior of the buildings. They also encompass related landscape features and the building's site and environment, as well as attached, adjacent, or related new construction. To be certified for Federal tax purposes, a rehabilitation project must be determined by the Secretary to be consistent with the historic character of the structure(s), and where applicable, the district in which it is located.

As stated in the definition, the treatment "rehabilitation" assumes that at least some repair or alteration of the historic building will be needed in order to provide for an efficient contemporary use; however, these repairs and alterations must not damage or destroy materials, features or finishes that are important in defining the building's historic character. For example, certain treatments—if improperly applied—may cause or accelerate physical deterioration of the historic building. This can include using improper repointing or exterior masonry cleaning techniques, or introducing insulation that damages historic fabric. In almost all of these situations, use of these materials and treatments will result in a project that does not meet the Standards. Similarly, exterior additions that duplicate the form, material, and detailing of the structure to the extent that they compromise the historic character of the structure will fail to meet the Standards.

The Secretary of the Interior's Standards for Rehabilitation

The Standards (Department of Interior regulations, 36 CFR 67) pertain to historic buildings of all materials, construction types, sizes, and occupancy and encompass the exterior and the interior, related landscape features and the building's site and environment as well as attached, adjacent, or related new construction. The Standards are to be applied to specific rehabilitation projects in a reasonable manner, taking into consideration economic and technical feasibility.

1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.
2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.
3. Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.
4. Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.
5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a property shall be preserved.
6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.
7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.
8. Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.
9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.